

2014 - 2020 Interreg V-A
Italy - Croatia CBC Programme
Call for proposal 2019 Strategic

MARLESS (MARine Litter cross-border awareNESS and innovation actions)

Priority Axis: Environment and cultural heritage; Specific objective: 3.3 - Improve the environmental quality conditions of the sea and coastal area by use of sustainable and innovative technologies and approaches

D.5.1.1 Analysis of the State of the art on Marine Litter Management, from both Italian and Croatian legislative perspective

Activity Number 5.1

WP number 5

Version: FINAL
Distribution: PUBLIC
Date: June 2023

PROJECT MARLESS

Work Package:	W5 Cross-boundary management plan
Activity:	5.1 Analysis of the legislation and the related constraints.
WP Leader:	PP 1 MESD Ministry of Economy and Sustainable Development
Deliverable:	D.5.1.1 1 Analysis of the State of the art on Marine Litter Management, from both Italian and Croatian legislative perspective

Version:	Final	Date:	JUNE 2023
Type:	Deliverable		
Availability:	Public		
Responsible Partner:	ARPAV		
Involved Partner	PP1 - Ministry of Economy and Sustainable Development, MESD		
Editor:	Marta Moranzio		
Contributors:	Institute of Oceanography and Fisheries, Split, Croatia as subcontractor on project of PP1 MESD (Consultants: dr.sc. Pero Tutman & dr.sc. Dubravka Bojanić Varezić) ARPAV: Andrea Torresan		

DISCLAIMER : This deliverables reflects the project MARLESS views; the IT-HR Programme authorities are not liable for any use that may be made of the information contained therein.

INDEX

Aim of the work	4
What About?	4
EU.....	7
ITA.....	27
VENETO REG.....	37
FRIULI VENEZIA-GIULIA.....	42
HR	45

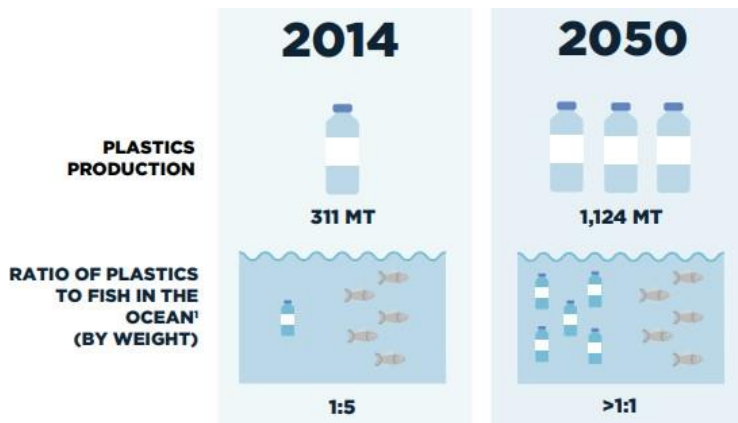
Aim of the work

The present deliverable has the scope to analyze the State of The Art of the current legislation regarding the theme of the removal and treatment of waste in the marine-coastal environment. The regulatory analysis realized at European, national and regional level aims to improve and facilitate the application of legislation of both Italian and Croatian side. Moreover, carrying out this analysis allows to understand the different measures planned for the management of marine litter comparing those provided by the partner countries involved in the project, with the aim of increasing the level of awareness and consistency for this relevant actual theme.

Plastic is an important and ubiquitous material with multiple functions that allow us to face a series of challenges that our society faces. However, too often the way in which plastic is currently produced, used and disposed of does not allow the economic advantages of a more "circular" approach and damages the environment. It is not just a matter of mess and dirt, the plastic waste hurts the animals that can get trapped or trade the plastic waste for food. In the same way, through the food chain we eat the plastic ingested by the fish which could bring many negative effects on human health already widely visible. Plastic waste also causes economic loss for sectors and communities dependent on marine products, including manufacturing: only 5% of the value of plastic packaging remains in the economy - *the rest is literally thrown away*, making the need for a recycling and re-use approach even more evident (EU Parliament, 2021). The results of today's single-use, throw-away plastic culture can be seen on sea shores and in oceans everywhere. Plastic waste is increasingly polluting the oceans and according to one estimation, by 2050 the oceans could contain more plastic than fish by weight.

The European Union has drawn up a list of the most frequent objects that end up in marine waters as floating material, deposited on the seabed or beached on the coast. In this list, plastic objects constitute the largest group: plastic cutlery, bottles, cigarette butts or cotton buds make up, all together, more than half of total marine litter whose presence has often been confirmed during the monitoring activities carried out with Marless project.

Despite the green policies proposed over the years driven by the desire to improve the quality of the environment, Europe still ranks among the most polluting countries in the world for the amount of plastic material produced and poured into the sea (CNR - National Research Council, 2018)



The massive production of plastic associated with minimum recycling rates will lead to a scenario difficult to reverse. But what are we doing at legislative level to reverse this trend? What has been done so far and how should we continue?

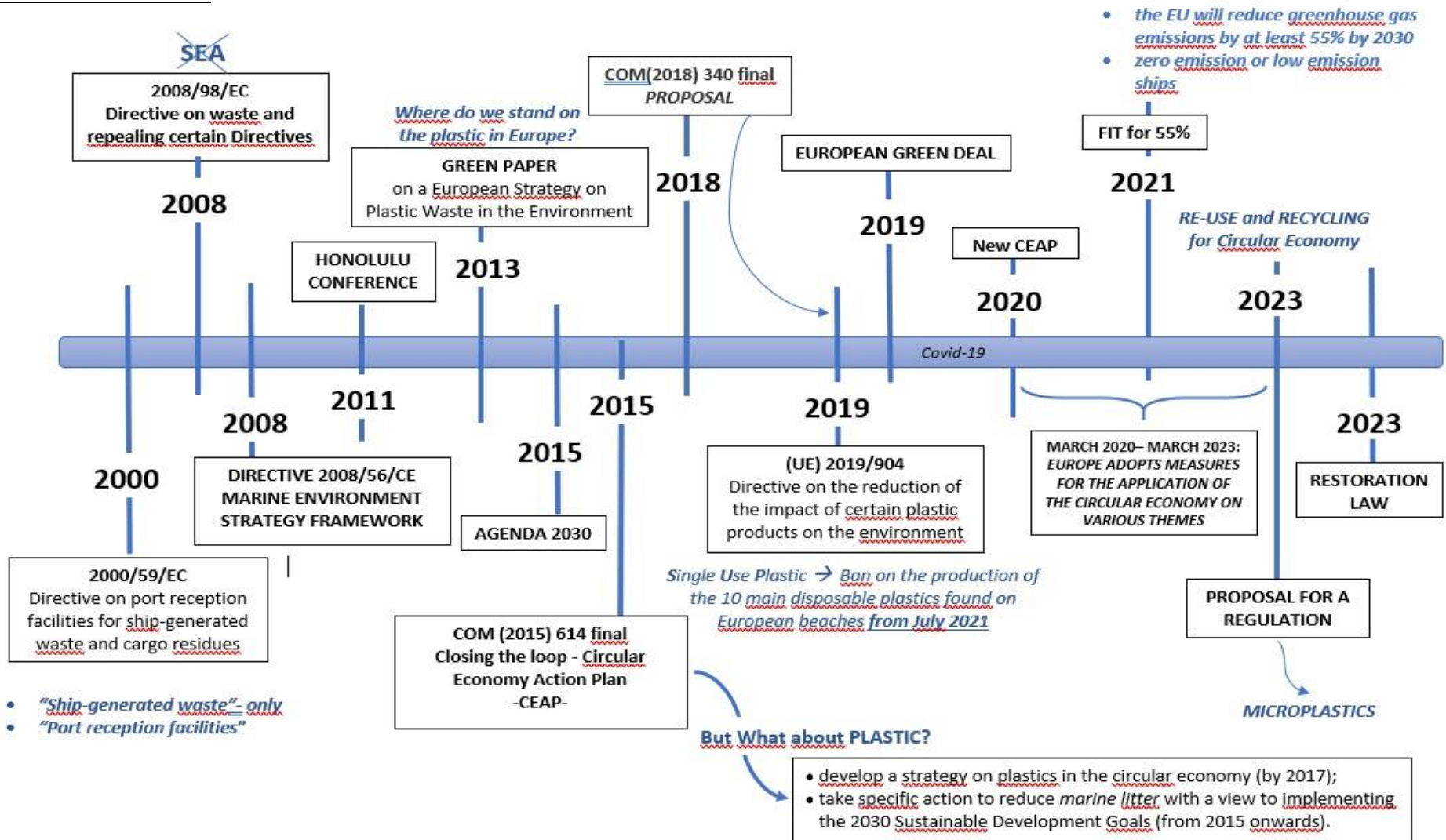
Source: Part of “*The New Plastics Economy_ Rethinking the future of plastics*, Ellen MacArthur Foundation” 2015

In order to answer these questions, it is necessary to analyse the existing state of the art for marine litter legislation at European level and subsequently at national and regional level.

It is important to understand what steps have been taken so far and in what direction the next steps should be taken: understanding the legislative past aims to highlight how legislation has evolved over the years to address the problem of pollution in the seas. Sometimes legislative blockades have slowed down the application of laws in various territories; having a clear legislative framework makes it possible to avoid the dispersion of information on the subject and to consolidate the need for continuous interchange and to work intelligently towards a common goal.

So, What about the legislation on plastic at sea in force in Europe, Italy and at regional level?

What about EUROPE?



LEGISLATIVE TRAIN:

EUROPE

2000

Directive 2000/59/EC of the European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues

Directive 2000/59/EC is issued in the year 2000 with the aim of reducing discharges into the sea of waste from ships and improving the availability and use of port reception facilities used for such waste and thus strengthening protection of the marine environment. In this European directive the concepts of "ship-generated waste" and "port reception facilities" are introduced; with the former all waste, including waste water, and residues other than cargo residues, produced during the service of a ship and falling within the scope of Annexes I, IV and V to Marpol 73/78 shall be considered, and the waste associated with the cargo referred to in the Guidelines for the implementation of Annex V to Marpol 73/78. With the concept of "port reception facilities" any structure, fixed, floating or mobile, that is able to receive the waste produced by the ship or the cargo residues.

Environmental protection is a priority in this Directive: an appropriate waste collection and management plan shall be drawn up and implemented for each port; moreover, in article 7 it is reported that in case of impossibility of delivery of waste in a collection plant and there is the risk that the waste is discharged into the sea is expressly indicated that all Member States must take the necessary measures preventing marine pollution.

2008

DIRECTIVE 2008/56/CE 17 June 2008 MARINE ENVIRONMENT STRATEGY FRAMEWORK DIRECTIVE

The Marine Strategy Framework Directive (MSFD-2008/56/EC) is an important instrument for the governance of the sea system, promoting the adoption of complex strategies aimed at safeguarding the marine ecosystem to achieve a **Good Environmental Status – GES**.

Art. 3

Good environmental status of marine waters shall mean the ability to preserve ecological diversity, the vitality of the seas and oceans for them to be clean, healthy and productive by maintaining the use of the marine environment at a sustainable level and safeguarding the potential for the uses and activities of present and future generations

The cross-border nature of the marine environment makes it essential to use the instrument of regional cooperation between States bordering the same sea. MSFD aims to develop effective governance and to identify shared and consistent analysis and monitoring methods. Within the Framework Directive, cooperation is of particular importance in order to identify common goals and lines of action for all countries sharing the same basin, including non-EU countries, to overcome the problem of marine litter.

The Directive has divided European marine waters into four regions: the Baltic Sea, the North-East Atlantic Ocean, the Mediterranean Sea and the Black Sea, some of which have been further subdivided into sub-regions. Three sub-regions have been identified in the Mediterranean:

- a) the western Mediterranean,
- b) the Adriatic Sea
- c) the Ionian Sea and the central Mediterranean.

Italian waters belong to all three sub-regions.

Moreover...

Together with the other European Directives, in particular the **Habitats (92/43/EEC)**, **Wild birds (2009/147/EC)**, **Water (2000/60/EC)** and other regulatory instruments such as the **Common Fisheries Policy (CFP, Reg. EU 1380/2013)**, the Marine Environment Strategy ensures, in addition, a robust political and legal framework for the fulfilment of international commitments relating to the protection of marine biodiversity, such as the **Convention on Biological Diversity (CBD)** and the **Barcelona Convention for the Protection of the Mediterranean (UNEP/MAP)**.

2008

DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives

The Directive on Waste 2008/98/EC already paved the way for a new thinking in waste management. It establishes extended producer responsibility (Article 8) and describes strong and innovative drivers for sustainable production taking into account the full life cycle of products. Member States are encouraged to take legislative or non-legislative measures in order to strengthen re-use and the prevention, recycling and other recovery operations of waste. Producers should be encouraged to engage in setting up acceptance points for end-of-life products. They may engage in waste management and take financial responsibility for that activity. They shall make information publicly available on the extent to which a product is re-usable and recyclable. Appropriate measures shall be taken to encourage the design of products in order to reduce their environmental impact and the generation of waste during production and subsequent use. Such measures may encourage development, production and marketing of products that are fit for multiple use, technically durable and fit for environmentally-safe end-of-life management.

The policy options presented in this section follow a life-cycle approach starting with plastic design. It is indeed clear that design of plastics and plastic products play a key role for sustainability and determine further stages in the life-cycle of plastics. For example, plastic recycling depends to a large extent on the composition of plastic materials and on the design of plastic products.

2011

Honolulu Conference

The 5th International Conference on Marine Litter held in Honolulu, Hawaii in March 2011 brought together representatives of governments, large companies and researchers from 35 countries with the aim of building a first step towards a global strategy and action plans on marine pollution by plastic. During the conference, it was agreed that under-developed waste management systems in many countries are one of the main problems since they are the first factor affecting the transfer of plastic waste from land to the environment marine. This is also due to the lack of coordination between global and regional marine pollution management programmes, gaps in the application of existing international and national rules and the modes of production and consumption are at the root of this problem. One of the main outcomes of the Hawaii conference is the adoption of "The Honolulu Commitment", a final declaration that proposes a cross-sectoral approach to reducing marine litter and the damage it causes to marine habitats, biodiversity, economy and human health. To improve waste management worldwide, the Honolulu Declaration encourages "To share market-

based technical and legal solutions in order to reduce the amount of marine litter and to improve local and regional understanding of the impact of the problem.

According to the United Nations Environment Programme (UNEP), the elements of the Honolulu Final Declaration constitute the first stage in the development of a global platform for the prevention, reduction and management of marine litter. The draft "Honolulu Strategy" aims to provide a strategic framework for coordinating action plans designed to reduce and manage marine litter globally and establishes a framework for reducing the impact of marine litter over the next 10 years, to be achieved through the collective action of committed global, regional, national, local and individual stakeholders. Marine debris is considered in the Conference to be waste of any anthropogenic origin, manufacture, or processing of solid material, regardless of size, discarded, disposed of, or abandoned in the environment, including all waste materials at sea, on the beach, or carried indirectly to the sea by rivers, sewage, storm water, or wind. Plastic in the seas is identified in the Conference as a constant threat to the environment which further exacerbates the economic costs incurred to human health, on safety and in the tourism and fishing sectors.

The declaration also sets out some clear goals, chief among them the creation of a **Global Waste Management Partnership** to create close cooperation with all stakeholders to reduce the damage done to the marine environment:

- Working in partnership with public and private entities to prevent marine litter;
- Working with the scientific community to better understand the origins, extent, and impact of marine litter and possible solutions to the problem;
- Promote science-based global policies and enforcement of existing laws to prevent marine litter;
- Promote the best waste management solutions, especially in coastal regions;
- Improve plastic product recovery solutions through recycling and energy recovery;
- Oversee the transportation and distribution of plastic raw materials and products to its customers and promote this practice throughout the supply chain.

2013

GREEN PAPER On a European Strategy on Plastic Waste in the Environment

The GREEN PAPER provides a contribution to assessing the actual risks to the environment and human health associated with plastics when products become waste, to address the issue of their functional eco-design. In addition, document proposes a reflection on the uncontrolled disposal of plastic waste and marine waste. In addition to taking stock of the situation, the document assesses the interests at stake of the various interested parties and invites them freely to submit comments and proposals for improvement compared to those already made in this document. The GREEN PAPER acknowledges that despite the increasing environmental impact, plastic waste is not specifically treated by EU legislation; only Packaging Regulation 94/62/EC set a specific recycling target for plastic packaging. Otherwise, the Waste Framework Directive 2008/98/EC, despite enshrining the principle of responsibility and the waste hierarchy, keeps alive a large gap between regulatory obligations and current practices in waste management.

In the GREEN PAPER **26 questions** are presented that deal with issues related to waste and current legislation; some of these are here reported:

- (1) Can plastic be appropriately dealt with in the existing legislative framework for waste management or does the existing legislation need to be adapted?
- (2) How can measures to promote greater recycling of plastic best be designed so as to ensure positive impacts for enhanced competitiveness and growth?
- (3) Should separate door step collection of all plastic waste combined with pay-asyou-throw schemes for residual waste be promoted in Europe, or even be made mandatory?
- (4) How can challenges arising from the use of micro plastics in products or industrial processes and of nano-particles in plastics be best addressed?
- (5) Would it be appropriate to reinforce existing legal requirements by making a clear distinction between naturally compostable and technically biodegradable plastics, and should such a distinction be subject to mandatory information?
- (6) Would the use of oxo-degradable plastic require any kind of intervention with a view to safeguarding recycling processes, and if so, on which level?

- (7) How should bio-based plastics be considered in relation to plastic waste management and resource conservation? Should the use of bio based plastics be promoted?
- (8) Should the EU attach a higher priority to plastic waste in the framework of its "New Neighbourhood Policy", particularly in order to reduce plastic littering in the Mediterranean and in the Black Seas?
- (9) How could the EU promote more effectively international action to improve plastic waste management worldwide?

In particular, the issues of **biodegradable plastic** and **bioplastic** and related associated issues are discussed.

BIODEGRADABLE PLASTIC → Related problems

About the term:

Biodegradable plastic products are often perceived as a potential solution to plastic littering and have attracted increasing public attention. Although it is still a small segment of the market, production of biodegradable plastics operates today at industrial scale capacity.

- The term "biodegradable" itself may be misunderstood by consumer. While they might interpret the labelling "biodegradable" to mean fit for home composting, in reality, the large majority of biodegradable plastics can only biodegrade under very specific conditions of constantly high temperature and humidity in industrial composting installations and are neither fit for home composting.
- Compostaggio domestico ≠ compostaggio industriale
- Confusion could cause consumers to take insufficient care in their disposal out of a misunderstanding that objects labelled as biodegradable would decay within short time periods under natural conditions

Plastica oxodegradabile →
 is a type of "traditional" plastic to which special additives have been added. The presence of these additives does not change the composition or characteristics of the plastic: rather, their purpose is only to encourage the fragmentation of the plastic itself following specific environmental conditions of light and heat. The triggered reaction breaks certain bonds in the polymer chain and the plastic is reduced to "microscopic fractions" in a relatively short time

Oxo-degradation residues may have unclear impacts and they might risk contributing to the microplastics load reaching the marine environment. The presence of oxidising agents in the plastic waste streams may also make plastic recycling more difficult. It should be assessed whether the use of the term biodegradable is at all permissible in this case.

Another question is:
In which measure biodegradable plastic can be a solution to plastic marine pollution?

→ Decomposition in the marine environment depends on many factors, such as the type of product, the sufficient presence of relevant micro-organisms, the water temperature and the density of the product. Moreover, many biodegradable plastics may not degrade in the intestines of marine species and injury is likely to remain an issue.

There are several barriers for biodegradable plastics to achieve quick market penetration.

- Existing manufacturing chains, used to petroplastics, may need costly adaptation to function with biodegradable plastics.
- The exact influence of biodegradable plastic on aquatic environments, as well as compost toxicity, is yet further to be investigated.
- Waste treatment systems already in place are not yet capable of separating sufficiently biodegradable plastic from conventional plastic which can jeopardize recycling processes.
- Technical adaptation might increase separation costs because more sophisticated equipment is likely to be required.

BIO-BASED PLASTICS

Relative problems

While the market is still dominated for over 99% by petroleum-based plastic, there is an emerging and growing market for bio-based plastic produced from renewable resources. Current bio-based plastics are usually made from starch extracted from maize, rice, sugar cane or potatoes.

- The prefix "bio-based", is clearly defined by the European Committee for Standardization (CEN)79. Yet, consumers need to be fully informed that this relates to the origin of the resource and not to end of life management. Although the majority of biodegradable plastics are currently bio-based plastics, biodegradable plastics can also be made from petroleum based or a combination of petroleum and bio-based resources.
- Moreover, some bio-based polymers, such as polyethylene (PE) from bio-ethanol are not biodegradable.
- Competition with food production, already broadly discussed in the context of biofuels, is a problematic and highly disputed issue for bio-based plastics.
- A significant increase in bio-based plastics production to a level comparable to conventional plastics might negatively impact on the production of food crops used to make bio-based plastics, and also have a negative impact on economies in transition.
- Another problem related to the production of bioplastics is the consequent exploitation of soil, water consumption, increase in raw material prices and loss of biodiversity: such concerns would not apply to bio-based plastics made from agricultural waste and food-crops by-products or saltwater algae.

From the technical summaries carried out over the years, the GREEN PAPER

emphasizes the emergence of the problem and the urgency of carrying out further coordinated

research to ensure a common approach is adopted for the monitoring and reduction of the problem. The Commission has launched a dialogue with stakeholders (plastics manufacturers, recycling managers, packaging industry, port and maritime authorities and NGOs), in order to establish voluntary partnerships and initiatives to address the problem of marine litter. Discussions were launched to establish policy-oriented targets: ongoing projects would have allowed a reference scenario for the EU to be developed in 2013 and would have helped to establish milestones and policy objectives.

2015

AGENDA 2030 – 25 September 2015

The 2030 Agenda for Sustainable Development is an action programme for people, the planet and prosperity. Signed on 25 September 2015 by the governments of the 193 member countries of the United Nations, and approved by the UN General Assembly, the Agenda consists of **17 Sustainable Development Goals, Sdgs** - framed within a broader action programme consisting of 169 associated targets or targets to be achieved in the environmental, economic, social and institutional fields by 2030. This programme does not solve all the problems but represents a good common basis from which to build a different world and give everyone the opportunity to live in a sustainable world from an environmental, social and economic point of view. The objectives set for sustainable development have a global validity, concern and involve all countries and components of society, from private companies to the public sector, from civil society to information and culture operators. The 17 Goals refer to a set of important development issues that take into account in a balanced way the three dimensions of sustainable development - economic, social and ecological - and aim to end poverty, combating inequality, tackling climate change, building peaceful societies that respect human rights. In particular, the objective n. 14 "Underwater Life: Conserve and use in a lasting way the oceans, the seas and the marine resources for a sustainable development" brings the focus on the problem of marine litter pollution in three specific objectives:

- Objective 14.1 of the 2030 Agenda states that by 2025 it is necessary to prevent and significantly reduce marine pollution of all types, in particular from land-based activities, including marine litter and nutrient pollution of water
- Objective 14.2 states that sustainable management and protection of marine and coastal ecosystems must be ensured by 2020 in order to avoid significant negative impacts, including by strengthening their resilience and by acting to restore them, in order to obtain healthy and productive oceans

- Objective 14.5 states that by 2020, at least 10% of coastal and marine areas should be protected, consistent with national and international law and based on the best available scientific information

And today, have we achieved these goals that Europe had set?



SDG 14 TARGETS:

- 14.1** By 2025, prevent and significantly reduce marine pollution of all kinds
- 14.2** By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts
- 14.3** Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels
- 14.4:** By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices
- 14.5:** By 2020, conserve at least 10 per cent of coastal and marine areas
- 14.6** By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing
- 14.7** By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources

2015

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS -

December 2015: Closing the loop - An EU “FIRST” CIRCULAR ECONOMY ACTION PLAN

The use of plastics in the EU has grown steadily, but less than 25% of collected plastic waste is recycled and about 50% goes to landfill. Large quantities of plastics also end up in the oceans, and the 2030 Sustainable Development Goals include a target to prevent and significantly reduce marine pollution of all kinds, including marine litter. Smarter separate collection and certification schemes for collectors and sorters are critical to divert recyclable plastics away from landfills and incineration into recycling. The presence of hazardous chemical additives can pose technical difficulties and the emergence of innovative types of plastics raises new questions, e.g. as regards plastics biodegradability. However, innovation in plastics can contribute to the circular economy by better preserving food, improving the recyclability of plastics or reducing the weight of materials used in vehicles. In order to address these complex and important issues, Europe drafted the first Circular Economy Package, which included an action plan of 54 actions to accelerate the transition to a circular economy. The actions foreseen by the Circular Economy Action Plan are:

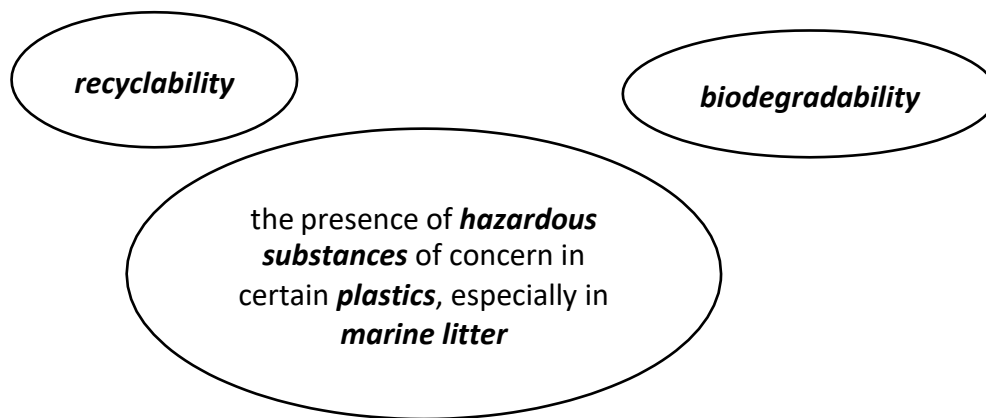
- making products sustainable the standard in the EU
- empowering consumers and public buyers;
- focus on sectors that use most resources and where the potential for circularity is high as:
 - batteries and vehicles;
 - electronics and ICT;
 - packaging;
 - plastic materials;
 - textiles;
 - construction and buildings;
 - food;
 - water and nutrients;
 - ensure less waste;
 - making the circularity work for people, regions and cities;
 - to direct global efforts towards the circular economy.

The EU commission will prepare a strategy addressing the challenges posed by plastics throughout the value chain and taking into account their entire life-cycle. It will also take action to fulfil the objective of significantly reducing marine litter. In the context of the 2016 revision of the Directive on port reception facilities, the Commission will also address the issue of marine litter from ships and examine options to increase its delivery to and adequate treatment by port reception facilities.

A number of other elements of this action plan will also help to increase plastics recycling, including:

- The Ecodesign Directive or Sustainable Design
- The Ecolabel, label of voluntary ecological quality
- Il Green Public Procurement (GPP EU), environmental policy instrument that aims to foster the development of a market for products and services with reduced environmental impact

The concepts that the European Commission takes into account for the circular economy and respect for the environment are:



2018

Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the reduction of the impact of certain plastic products on the environment

On 16 January 2018, the European Commission published a communication laying out a strategy for plastics in a circular economy, in particular on the reduction of the impact of certain plastic products on the environment. The strategy identifies key challenges, including the low reuse and recycling rates of plastic waste and the limitation of the excessive use of **disposable plastic**, the greenhouse

gas emissions associated with plastics production and incineration, and the presence of plastic waste (including microplastics) in oceans. The Commission proposes its 'vision for Europe's new plastics economy', where among other things, all plastic packaging should be designed to be recyclable or reusable by 2030.

Moreover, in its resolution of 13 September 2018 on the European strategy for plastics in a circular economy (2018/2035(INI)), the European Parliament welcomed the proposal and urged the Commission, among other things, to consider introducing requirements for minimum recycled content for specific plastic products put on the EU market; to come forward swiftly with quality standards for recycled plastics in order to build trust and incentivise the market for secondary plastics; to ban intentionally added microplastics in products as well as oxo-degradable plastics by 2020; to set minimum requirements in product legislation to significantly reduce the release of micro-plastics at source (in particular for textiles, tyres, paints and cigarette butts); and to fulfil its obligation to review the essential requirements laid down in the Packaging and Packaging Waste Directive by the end of 2020. ***The resolution emphasised that although biodegradable and compostable plastics can help support the transition to a circular economy, they cannot be considered a remedy against marine litter or legitimise unnecessary single-use applications.***

2019

DIRECTIVE (EU) 2019/904 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 June 2019 on the reduction of the impact of certain plastic products on the environment: “The SUP Directive”

The SUP Directive is a regulatory intervention of the European Union, which must be transposed by the member states, which from 2021 prohibits the use of certain disposable plastic products for which there are already alternatives on the market. In May 2019, a Directive was approved by the European Union with the aim of combating marine pollution caused by the dispersion of plastic. This regulatory intervention, known as the SUP Directive, took place in order to hit the types of plastic objects, in particular disposable plastic objects, most present among all the waste found on the beaches of our continent.

The SUP Directive aims to prevent and combat the creation of marine litter. The way chosen was to act at the source, that is to prohibit and discourage the production and marketing of some disposable plastic objects.

Based on existing EU legislation, legislators have established limitation rules for the types of products and packaging that are among the ten most frequently found on European beaches. Since that date, Member States have two years to transpose the legislation into national law.

With effect from 2021, the Directive prohibits the use of the following disposable plastic products or packaging:

- Cotton swabs for cleaning ears
- Cutlery (forks, knives, spoons, chopsticks)
- Plates (both plastic and paper with plastic film)
- Straws
- Mixers for beverages
- Balloon rods (excluding for industrial or professional use)
- Containers with or without lid (cups, trays with closures) in expanded polystyrene (EPS) for immediate consumption (fast-food) or removal (take-away) of food without further preparation
- Containers for drinks and cups always in EPS
- All disposable articles in oxodegradable plastic

The Regulation also prohibits the use of oxo-degradable plastic.

The SUP Directive explicitly states in art. 3 that the only polymers excluded from the prohibition are the natural ones not chemically modified. Bioplastics and vegetable plastics, whether they are derived from renewable sources (totally or partially) or from petrochemicals, are among the chemically modified polymers and therefore among the prohibited materials.

Otherwise, the non-chemically modified natural polymers that are not subject to the ban are the natural organic ones whose natural fibers have not been subjected to chemical changes, such as sugarcane, bamboo, hemp, cellulose, rice, rubber and coconut fibers.

Plastic bottles and glasses do not appear in the list of prohibited items. For the former, the motivation lies in the desire to enhance the recyclability of the PET with which they are produced, while the latter do not come into the Directive; therefore, the inclusion of such plastic objects will depend on the transposition of individual Member States.

In addition, the SUP Directive establishes separate collection goals and design requirements for disposable plastic bottles, tra cui:

- The directive sets a collection target of 90 % for the recycling of disposable plastic bottles by 2029 (with an intermediate target of 77 % by 2025).
- The material used to produce these bottles should consist of at least 25 % recycled plastic from 2025 (for PET bottles) and 30 % from 2030 (for all bottles).
- Those with plastic caps and lids may only be placed on the market if the caps and lids remain attached to the containers for the duration of the intended use of the product
- Implementing Decision (EU) 2021/1752 lays down detailed rules for the calculation, verification and reporting of data on the separate collection of waste from single-use plastic bottles for beverages.

2019

GREEN DEAL

The Green Deal is a roadmap for making the EU economy sustainable; it is a global plan proposed by the European Union (EU) to tackle climate change and achieve carbon neutrality by 2050.

The main objective of the Green Deal is to transform the EU economy into a sustainable, low-carbon and circular economy that benefits both the environment and society.

The Green Deal focuses on several key areas, including:

- **Climate action:** The EU aims to reduce greenhouse gas emissions by at least 55% by 2030 and achieve carbon neutrality by 2050.
- **Sustainable energy:** The Green Deal aims to increase the share of renewable energy in the EU energy mix and to improve energy efficiency.
- **Sustainable transport:** the EU aims to promote sustainable transport, including the development of electric vehicles and the use of alternative fuels.
- **Circular Economy:** The Green Deal aims to promote a circular economy that reduces waste and promotes reuse and recycling of materials.
- **Biodiversity:** the EU aims to protect and restore biodiversity and ecosystems, including forests, oceans and fresh waters.

The Green Deal is a significant and ambitious initiative that requires a collective effort by all EU Member States, businesses and citizens to achieve its objectives.

2020

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS A NEW CIRCULAR ECONOMY ACTION PLAN for a cleaner and more competitive Europe

The European Commission adopted the New Circular Economy Action Plan (CEAP) in March 2020. The new action plan announces initiatives along the entire life cycle of product and it is a prerequisite to achieve the EU's 2050 climate neutrality target and to halt biodiversity loss. Like the previous Circular Economy Action Plan, this promotes circular economy processes and aims to ensure that waste is prevented; compared to the previous plan, the Commission will implement all 35 actions listed in the new action plan.

It is essential to monitor progress towards a circular economy, and its direct and indirect benefits: this allows the EU and national authorities to assess whether policies are effective and to identify best practices. For this reason, in 2023, the Commission revised the circular economy monitoring framework, previously adopted in 2018. The revision adds new indicators on

- material footprint and resource productivity - to monitor material efficiency
- consumption footprint – to monitor if EU consumption fits within planetary boundaries

The new framework supports the EU's circular economy and climate neutrality ambitions under the European Green Deal.

MARCH 2020 – MARCH 2023: EUROPE ADOPTS MEASURES FOR THE APPLICATION OF THE CIRCULAR ECONOMY ON VARIOUS THEMES

2021

FIT FOR 55

To ensure that the EU can reach its 2030 target, the Commission proposed in 2021 a set of proposals known as Fit for 55 (55% ready) to revise and update EU legislation and to implement new initiatives to ensure that EU policies are in line with the climate objectives agreed by the Council and the European Parliament. Fit for 55% package includes 13 related legislative reforms and 6 climate and energy bill proposals. "Ready for 55%" refers to the EU target to reduce net greenhouse gas emissions by at least 55% by 2030; among the objectives, also includes maritime transport with a "zero emission or low emission ships" perspective

2023

PROPOSAL FOR A REGULATION

Adoption of several initiatives under the Circular Economy Action Plan, including measures to reduce the impact of **microplastic pollution on the environment**. This *initiative* aims to tackle microplastics unintentionally released into the environment. It will focus on labelling, standardisation, certification and regulatory measures for the main sources of these plastics.

It aims to:

- improve the science on the risks and occurrence of microplastics in the environment, tap water and food
- reduce environmental pollution and potential health risks, while respecting the principles of the single market and encouraging competitiveness and innovation.

This document aims to inform the public and stakeholders on the Commission's future legislative work so they can provide feedback on the Commission's understanding of the problem and possible solutions. This document is for information purposes only. It is a proposal and it does not prejudice the final decision of the Commission on whether this initiative will be pursued or on its final content. All elements of the initiative described, including its timing, are subject to change.

The proposal presented in 2023 highlights several problems related to microplastics:

- 1. Absence of market incentives for operators to take measures to reduce unintentional microplastics releases in the environment**
- 2. Absence of EU comprehensive approach to unintentionally released microplastics**
- 3. Knowledge gaps about** the risks and occurrence of microplastics in the environment, drinking water and foods still need to be explored. Methods for sampling, processing, data analysis and reporting are not sufficiently harmonised.
- 4. Incomplete information reducing ability to choose sustainable products and handle them sustainably**
- 5. Market fragmentation:** some Member States and regional entities including Regional Sea Conventions are considering or implementing measures to address microplastic pollution. Giving examples, microfibre filters for new washing machines will be obligatory in France by 2025, even though there are those who warn of the potential risk of consumers washing such filters and releasing microplastics to wastewater.

Environmental pollution from microplastics is transboundary so that unintentional emissions from one Member State can contribute to pollution in another. In the absence of EU action, there is a risk

of a proliferation of measures, which could harm the internal market; for this reason, harmonised EU measures could bring economies of scale, reduced regulatory/administrative burden and a level playing field amongst responsible operators.

About this proposal, Commission adoption is upcoming.

2023

RESTORATION LAW

The European Commission’s proposal for a Nature Restoration Law is the first continent-wide, comprehensive law of its kind. It is a key element of the EU Biodiversity Strategy, which calls for binding targets to restore degraded ecosystems, in particular those with the most potential to capture and store carbon and to prevent and reduce the impact of natural disasters.

Europe’s nature is in alarming decline, with more than 80% of habitats in poor condition. Restoring wetlands, rivers, forests, grasslands, marine ecosystems, and the species they host will help

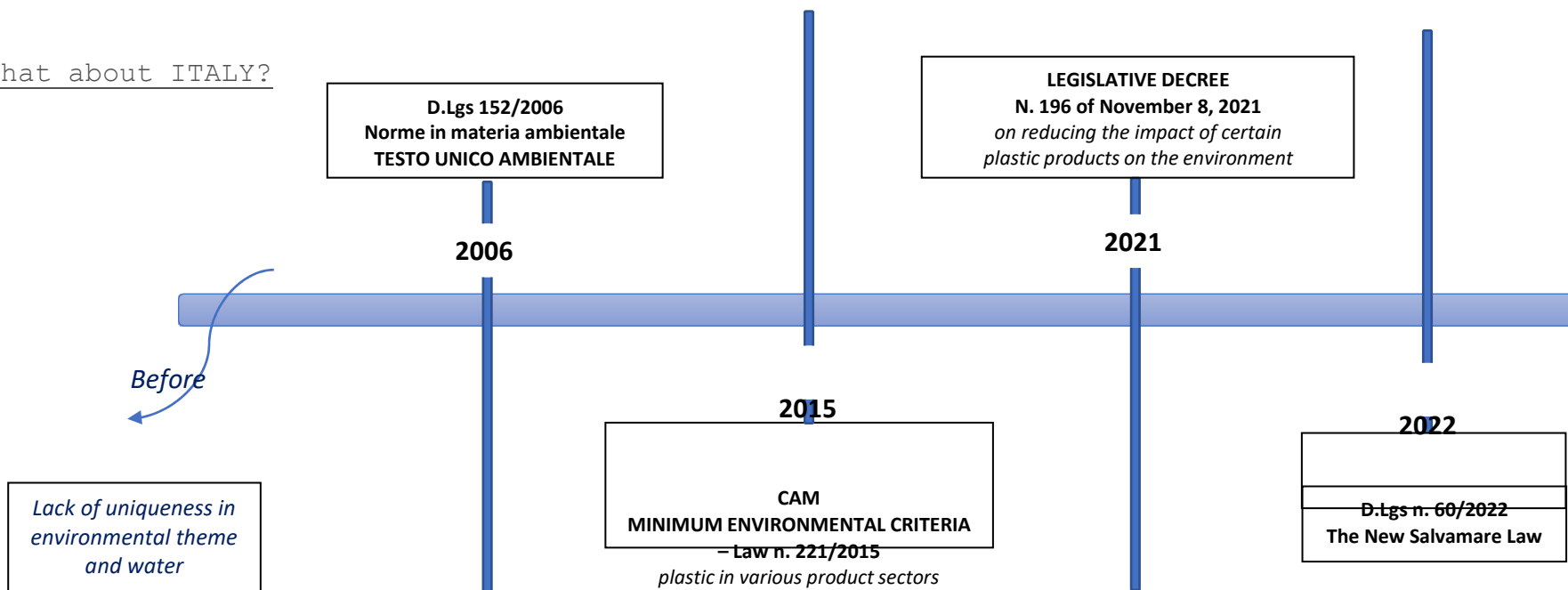


1. increase biodiversity
2. secure the things nature does for free, like cleaning our water and air, pollinating crops, and protecting us from floods
3. limit global warming to 1.5°C
4. build up Europe’s resilience and strategic autonomy, preventing natural disasters and reducing risks to food security

THE NATURE RESTORATION LAW WILL:

<p>Restore at least 20% of EU land and sea by 2030, and all ecosystems in need of restoration by 2050</p>	<p>Require Member States to develop National Restoration Plans taking account of national circumstances</p>	<p>Build on EU nature laws, focusing on all natural habitats, and not just those protected under Birds and Habitats Directives or Natura 2000</p>	<p>Demonstrate EU leadership in protecting and restoring nature and set the bar for global action ahead of the Biodiversity COP15</p>
--	--	--	--

What about ITALY?



LEGISLATIVE TRAIN:

ITALY

2006

D.Lgs 152/2006: Legislative Decree 3 April 2006, n. 152 on Environmental Act

The introduction of the Single ENVIRONMENTAL ACT represents a turning point in Italian legislation. Until now, the environment was considered in a fragmented way in its various parts, without an overview. The D.Lgs 152/2006 has as a novelty the desire to unify the various environmental components, so as to consider them different parts from each other but at the same time consider them unique. In the Law, every environmental matrix is thoroughly treated: water, air, soil are protected by specific limits to ensure the good level of environmental quality.

In particular:

- *in the third part* is treated the protection of water from pollution and the management of water resources
- *in the fourth part* the Environmental Act deepens the management of waste and the remediation of sites contaminated by waste
- *in the sixth part*, compensation for environmental damage.

This Legislative Decree clearly defines various concepts including packaging, recycling, disposal and prevention and enshrines in the classification of municipal waste, inter alia, "waste of any nature or origin lying on roads and public areas or on roads and private areas in any case subject to public use or on sea and lake beaches and on the banks of waterways". The Environmental Consolidated Law (TUA, in Italian) has as its primary objective the promotion of levels of quality of human life, to be achieved through the preservation and improvement of environmental conditions.

2021

LEGISLATIVE DECREE No. 196 of November 8, 2021.

Implementation of Directive (EU) 2019/904, of the European Parliament and of the Council of June 5, 2019 on reducing the impact of certain plastic products on the environment.

This decree establishes measures to prevent and reduce the impact of certain plastic products on the environment, particularly the aquatic environment, and on human health, and to promote the transition to a circular economy; it aims to promote responsible behavior with respect to the proper management of plastic waste. This Decree also establishes measures to promote the use of recycled plastic suitable for direct food contact in beverage bottles.

In the definitions, the Decree includes the following definitions:

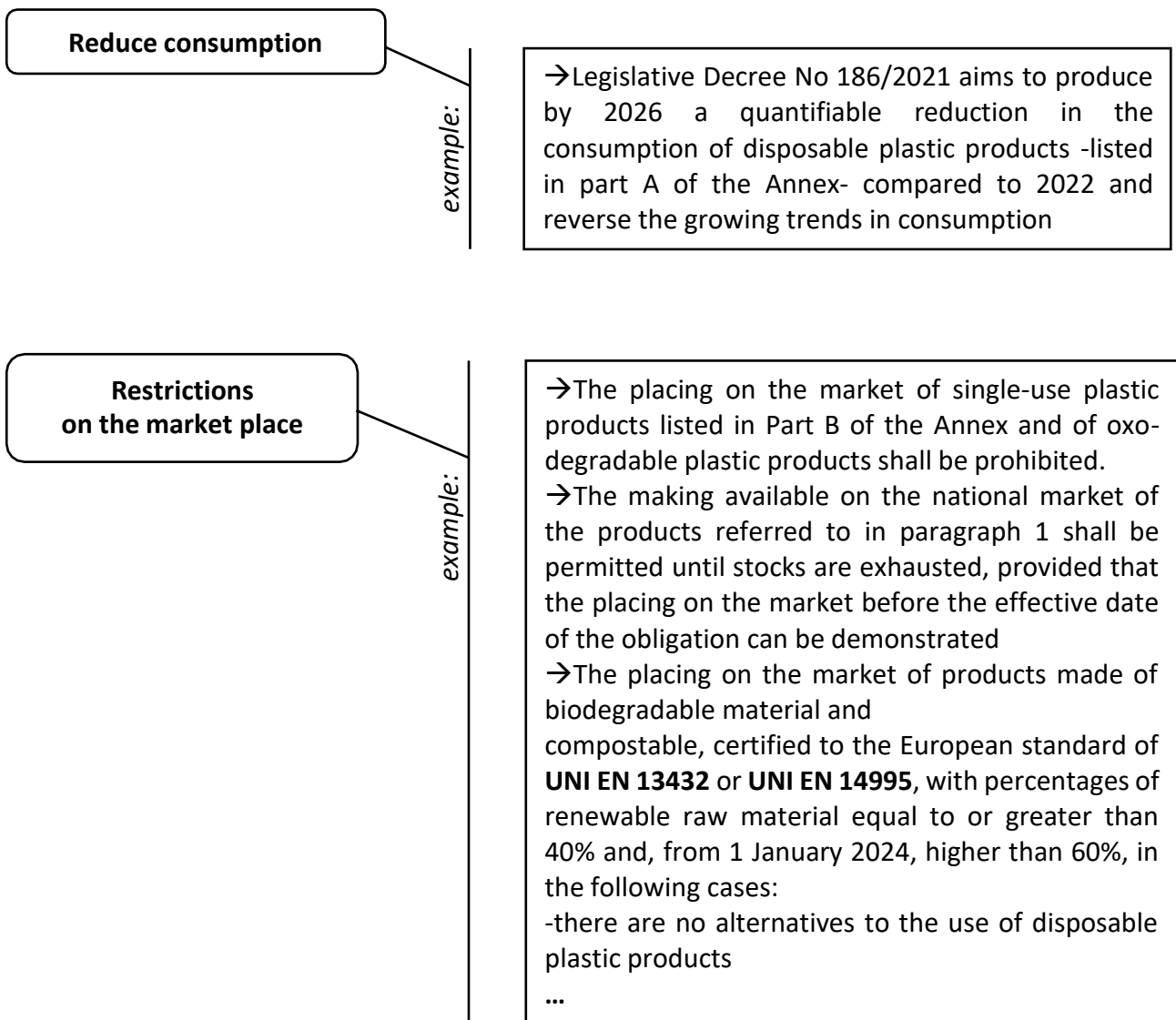
- a) **"plastic"**: material consisting of a polymer, as defined in point 5 of Article 3), Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 to which additives or other substances may have been added, and which may function as the main structural component of finished products, except for natural polymers which have not been chemically modified; materials such as paints are excluded from this definition, inks, adhesives and plastic

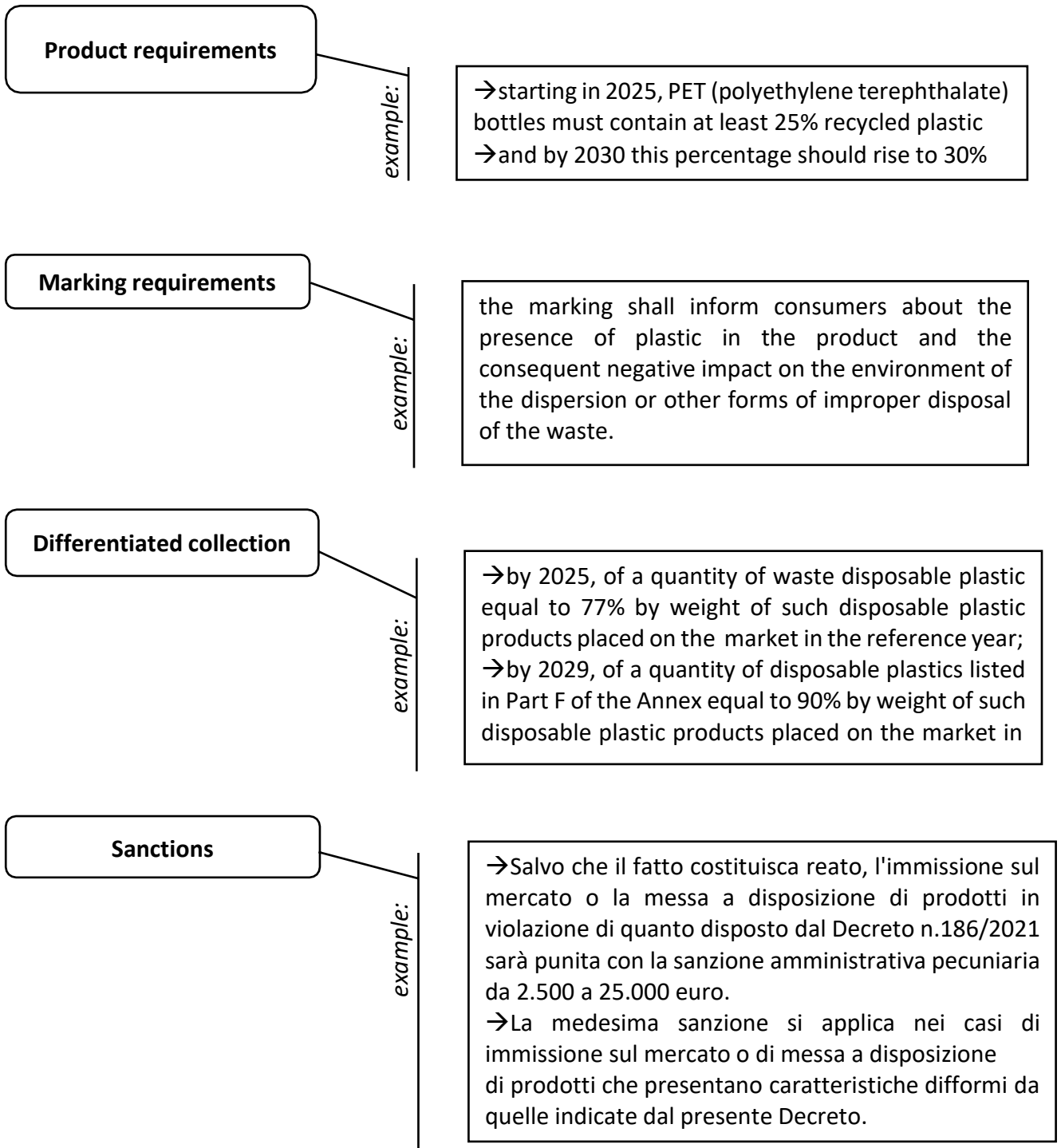
coatings weighing less than 10 per cent of the total weight of the product, which are not the main structural component of the finished products;

b) **“disposable plastic product”**: a product made wholly or partly of plastic, with the exception of a product made of natural polymers which have not been chemically modified, and which is not designed, designed or placed on the market to fulfil, during its lifetime, more than one movement or rotation to be returned to a manufacturer for charging or otherwise reused for the same purpose for which it was designed. For example, containers for dry food, including aged food, or for food sold cold that requires further preparation, shall not be considered as disposable plastic products, containers containing more than one portion of food or single-portion food containers sold in more than one unit;

c) **“oxo-degradable plastic”**: plastic materials containing additives which, through oxidation, result in the fragmentation of the plastic into micro fragments or chemical decomposition;

The Decree insists on the concepts of:





2022

The New Salvamare Law of May 17, 2022 n.60

On 10 June 2022, Law No.60 of 17 May 2022 on "**Provisions for the recovery of waste at sea and in inland waters and for the promotion of the circular economy**" was published, which entered into force on 25 June 2022. The aim of the Law is to contribute to the rehabilitation of the marine ecosystem and the promotion of the circular economy, as well as to the awareness of the community for the dissemination of virtuous behavioural models aimed at preventing the abandonment of waste in the sea, in lakes, rivers and lagoons and the proper management of waste.

The Act stresses the following definitions concerning inland waters:

- a) "**accidentally caught waste**" means waste collected at sea, in lakes, rivers and lagoons by nets during fishing operations and that collected occasionally at sea, in lakes, rivers and lagoons by any means;
- b) "**waste voluntarily collected**" means waste collected by means of waste capture systems, provided that it does not interfere with the eco-systemic functions of water bodies, and during the cleaning campaigns of the sea, lakes, rivers and lagoons referred to in letter c);
- c) "**clean-up campaign**" means the initiative planned to clean up the sea, lakes, rivers and lagoons in accordance with the conditions laid down in Article 3;
- d) "**awareness campaign**" means activities aimed at promoting and disseminating models behavioural virtuous prevention of the abandonment of waste at sea, in lakes, rivers and lagoons;
- e) "**competent authority**" means the municipality having territorial jurisdiction;
- f) "**promoter of the cleaning campaign**": the subject, among those qualified to participate in the cleaning campaigns for the sea, lakes, rivers and lagoons in accordance with Article 3, paragraph 3, which submits to the competent authority the request referred to in the aforementioned Article 3, paragraph 1;

The highlights of the **Salvamare Law** are the following:

1. Without prejudice to the provisions of this Article, incidental waste caught shall be treated as waste from ships within the meaning of point 3 of the first paragraph of Article 2, of Directive (EU) 2019/883 of the European Parliament and of the Council
2. The master of the vessel or the driver of the vessel calling at a port shall transfer the waste accidentally caught at sea to the port reception facility. In the case of the mooring of a vessel in areas not covered by the territorial competence of a port system authority,

the territorially competent municipalities shall provide that the waste is delivered to appropriate collection facilities, whether or not temporary, fitted out near berths.

3. The master of the vessel landing in a small non-commercial port shall transfer the accidentally caught waste to port reception facilities integrated into the municipal waste management system.
4. The supply of accidentally caught waste to the port facility of collection, after weighing of the same at the time of delivery, is free of charge for the conferent
5. For the purpose of distributing the charges referred to in this Article throughout the national community, the costs of managing incidental waste caught shall be covered by a specific component added to the waste tax
6. By decree of the Minister for Agricultural Food and Forestry Policies, in agreement with the Minister for Ecological Transition, to be adopted within four months of the date of entry into force of this Act, reward measures shall be identified, with the exception of economic provisions, to the master of the fishing vessel subject to compliance with the obligations laid down in this Article, which do not affect the protection of the marine ecosystem and compliance with safety rules.
7. Waste collected voluntarily may also be collected by means of waste capture systems, provided that they do not interfere with the eco-systemic functions of water bodies, and as part of specific cleaning campaigns organised on the initiative of the competent authority. Are promoters of cleaning campaigns:

- the managing bodies of protected areas
- the environmental associations
- fishermen's associations
- fishing cooperatives and enterprises, as well as their consortia
- sports and recreational fishermen's associations
- sports associations of divers and boaters
- the professional associations
- diving and diving training centers
- the managers of bathing establishments
- Third sector entities
- non-profit organizations of social utility
- social promotion associations
- foundations and associations with the purpose of promoting and protecting and safeguarding natural and environmental assets
- other entities identified by the competent authority.

The managing bodies of protected areas may also carry out, also in consultation with the representative bodies of fish entrepreneurs, public communication and environmental education initiatives to promote the campaigns referred to in this article.

8. In order to promote the recycling of plastics and other materials not compatible with the marine ecosystem and inland waters, the Minister for Ecological Transition shall establish the criteria and modalities for accidentally caught waste and waste voluntarily collected cease to be classified as waste
9. In order to reduce the impact of marine pollution from rivers, the District Basin Authorities shall introduce, in their planning acts, experimental measures in watercourses to capture floating waste, compatible with the needs of water and ecosystem protection
10. by 31 March 2022, the Ministry of Ecological Transition shall initiate a three-year experimental programme for the recovery of plastics in rivers most affected by this form of pollution, including by the installation of floating instruments
11. Awareness campaigns can be carried out regarding the protection of the marine environment, for the achievement of the aims expressed in the Salvamare Law and the objectives contained in the 2030 Agenda for sustainable development, adopted by the UN General Assembly on 25 September 2015.
12. In order to provide fishermen and operators with adequate information on the way in which accidentally caught or voluntarily collected waste is delivered, appropriate forms of advertising and awareness-raising by the port system authorities or by the municipalities territorially competent in the field of municipal waste management pursuant to Article 198 of the Legislative Decree of 3 April 2006, n. 152, including through technical protocols to ensure the mapping and advertising of harvesting areas and maximum simplification for fishermen and operators
13. The Ministry of Education promotes, in schools of all levels and levels, activities aimed at making pupils aware of the importance of the conservation of the environment and, in particular, of the sea and inland waters, and the correct conditions for the transfer of waste
14. The schools also promote good waste delivery practices and the recovery and reuse of goods and products at the end of the cycle, including with regard to the reduction of the use of plastics and the re-use systems available.
15. In the Amendment to Article 52 of the code referred to in Legislative Decree No. 171 of July 18, 2005 the following words are added at the end: *"also with reference to measures to prevent and combat the abandonment of waste at sea"*.
16. To fish farmers who, in the course of their activities, take part in cleaning campaigns or give the accidentally caught waste an environmental recognition attesting to the commitment to the environment
17. Provision is also made for municipalities to implement an incentive system for respect for the environment aimed at awarding recognition to boat owners, not engaged in professional activities, who recover and deliver ashore plastic waste accidentally caught or voluntarily collected.

18. In order to coordinate action to combat marine pollution, including that due to plastics, the **Permanent Inter-Ministerial Consultation Table** is established at the Ministry of Ecological Transition.
19. The Minister of Ecological Transition submit to the Chambers, by December 31 of each year, a report on the implementation of this law → *We are waiting for...?*

2015

CAM: MINIMUM ENVIRONMENTAL CRITERIA - ART. 18 of LAW on 28 DICEMBRE 2015 N. 221

CAM are the Minimum Environmental Criteria and are a tool that the Italian country has adopted to support virtuous operators who invest to reduce their environmental impact.

Their application is ensured by Art. 34 Criteria for energy and environmental sustainability of Legislative Decree 50/2016 or Procurement Code, and New D.Lgs 36/2023. As they introduce environmental sustainability requirements, CAMs are one of the tools that Italy uses to support the environment and force operators to adapt in order to enter public tenders with a green line.

What are the CAM in force to date, updated in June 2023?

To date, there are 19 CAMs in force and they address a variety of product sectors, including:

URBAN FURNITURE	LEATHER WORK FOOTWEAR AND ACCESSORIES	SANITIZATION AND CLEANING
VEHICLES	PAPER	INDUSTRIAL WASHING
CARTRIDGES	COLLECTIVE CATERING	PUBLIC GREEN
CONSTRUCTION	MUNICIPAL WASTE	HEATING/COOLING FOR BUILDINGS
TEXTILES	PUBLIC LIGHTING	+ MORE

New CAMs continue to be added to the existing ones by updating the list presented by the Italian Government on the basis of technological and market evolution.

What do the CAMs provide for plastics?

CAM furniture (for example for purchasing lamps or desks for public offices)

- If the total plastic content in the finished product exceeds 20% of the total weight of the product, then at least 30% recycled or bio-based plastic is required.

- The packaging shall consist of materials which are easily separable into parts consisting of only one material. In addition, if the plastic material is to be made of at least 30% recycled plastic or bio-based (note: if polystyrene the required % are different).

CAM Work footwear and leather accessories (for example for PPE boots or leather backpacks)

- In the production of soles must be used recycled PVC or PVC without thermal stabilizers based on lead and cadmium and phthalate-free low molecular weight

CAM Building (for example for the construction of a public building)

- Thermal and acoustic insulators must contain at least 2% to 60% recycled material depending on the type of plastic material
- Plastic packaging of lubricating oils must contain at least 25% recycled plastic

CAM Industrial washing and rental of textiles and mattresses

- If the detergent cannot be dispensed with transfer in fixed tanks at the laundry facility, then the plastic packaging must be made of at least 30% recycled plastic with vacuum to make the detergent manufacturer

CAM Municipal waste and road sweeping (for example for the supply of containers for municipal waste)

- New factory waste containers made of plastic must be composed of recycled material in a percentage between 30% and 90% depending on the type of container and destination (home or road containers)

CAM Group catering (for example, school canteens, barracks, hospitals)

- Where possible, products that are refillable or use packaging to make or form from recyclable, reusable, biodegradable and compostable or low volume materials shall be chosen and preferred. Single-dose or single-portion packages shall not be used unless otherwise required ex lege or justified by technical or specific requirements

CAM Sanitization (for example for cleaning services in civil or sanitary buildings)

- The plastic parts of the machines (for example, scrubber driers, pressure washers) must be marked with the coding of the polymer type. Hand cleaning equipment shall consist of trolleys with buckets and other plastic containers at least 50% by weight
- Only for buildings for civil use, for detergents used during ordinary cleaning, the primary packaging made of plastic must consist of at least 50% recycled plastic or comply with weight/utility (SPS) limits. For packages of detergents for periodic cleaning, at least 30% of the packaging must be recycled plastic

CAM Printers

- Plastic parts weighing more than 25 g shall bear the symbol of the polymer and be either made of a single polymer or made of polymers compatible with recycling

CAM Textiles (for example for the supply of masks or gowns)

Restrictions on the presence of particular chemicals

- Monomaterial packaging, recyclable and/or recycled. Products must not be packaged individually

CAM Vehicles (for example for the provision of means for passenger transport by road)

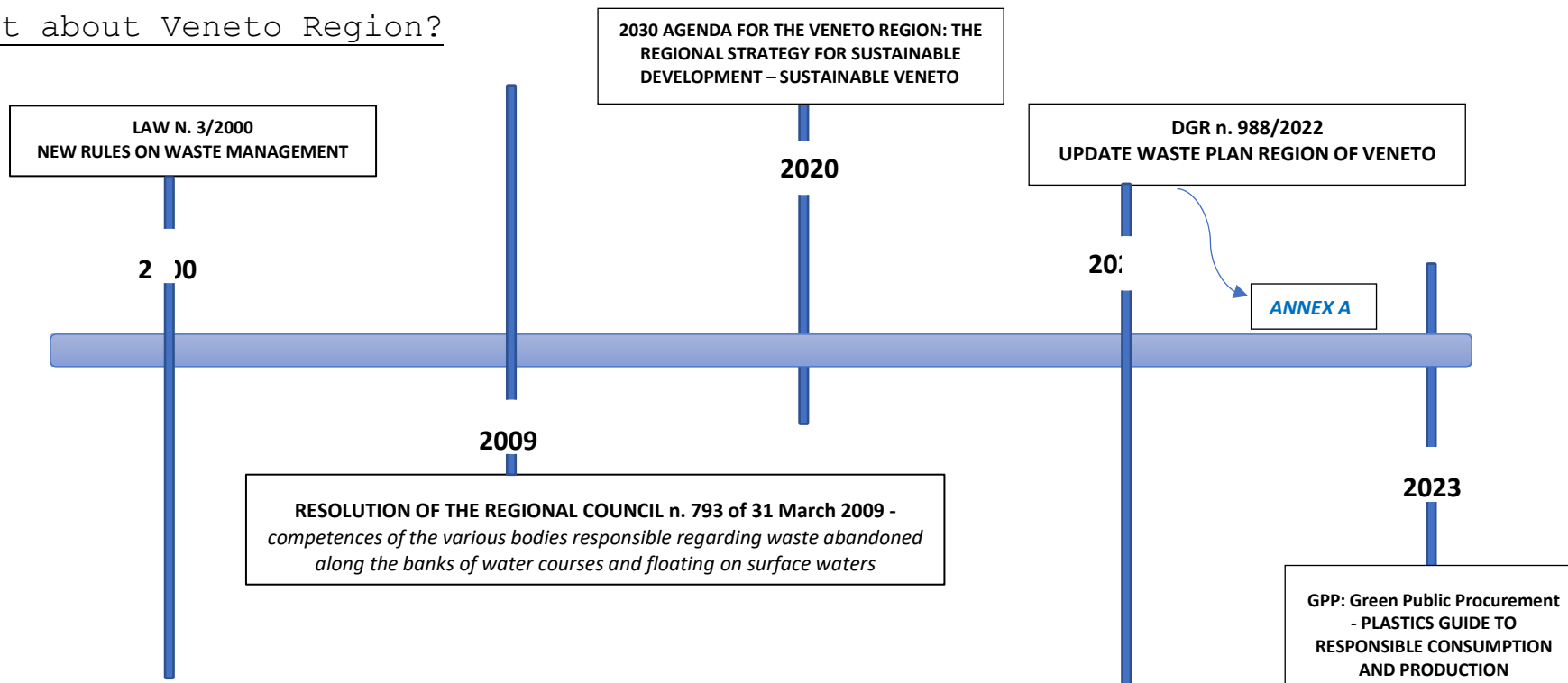
- Primary plastic packaging of lubricating oils consists of at least 25% recycled plastic

CAM Public green (for example for the maintenance of public green)

- Plastic containers and packaging must be made of at least 30% recycled plastic, must be recyclable and must be returned to the supplier for use.

The CAM or Minimum Environmental Criteria are sustainability requirements that the State proposes to companies to be admitted to public contracts; in the CAMs ***plastic and packaging*** are often mentioned with restrictions of various kinds, but commonly the reference is made to the minimum share of recycled or bio-based plastic to be used by the supplier.

What about Veneto Region?



LEGISLATIVE TRAIN:

VENETO REGION

REGIONAL LAW 21 January 2000, n. 3 - New rules on waste management.

This law identifies the administrative functions and tasks of the

In addition, the Act regulates the regional legislation on waste and the provisions relating to the special tax on the landfill of waste. Law 3/2000 favors and supports interventions aimed at the implementation of a system that promotes:

- 1) the reduction of waste production and danger;
- 2) the separate collection of municipal waste;
- 3) the selection and recovery of waste;
- 4) the marketing of materials obtained from the recovery of waste;

In particular, article 5 of the Regional Law n. 3/2000 establishes at the ARPAV - Regional Agency for the Prevention and Environmental Protection of the Veneto regional observatory on waste. The purpose of the Observatory is to organise the collection and processing of data on municipal and special waste management, including data on differentiated collections, compost production and cross-border waste transport. In cooperation with local authorities, ARPAV works to organise and develop the "regional database" also for facilities carrying out waste recovery operations.

Regional Law n. 3/2000 lists the competences of the various local authorities (municipalities, managing bodies...) and describes the implementation of the Regional Plan for the management of municipal, special, hazardous waste and the remediation of polluted sites.

RESOLUTION OF THE REGIONAL COUNCIL n. 793 of 31 March 2009 - Description of the competences of the various bodies responsible for ensuring the proper management of waste abandoned along the banks of water courses and floating on surface waters

The Resolution n.793/2009 is issued by a need to clearly review the bodies involved and their competences regarding the issue of waste management.

Taking up the aforementioned Legislative Decree No. 152/2006 on "Environmental Act" it is stated that in the classification contained in Article 184, paragraph 2, letter d), which are municipal waste, among others, ***"waste of any nature or origin lying on roads and public areas or on roads and private areas in any case subject to public use or on sea and lake beaches and on the banks of waterways"***. From the text of the first two paragraphs referred to in art. 198 of the same Consolidated Law it also emerges that ***"The municipalities contribute, within the framework of the activities carried out at the level of the optimal areas referred to in article 200 and with the procedures provided therein, to the management of municipal and [...] and provide for this by means of specific regulations laying down in particular a) the measures to ensure health and hygiene protection at all stages of municipal waste management; b) the arrangements for the***

collection and transport of municipal waste [...]". In turn the Regional Law n. 3/2000 for effect of art. 7, paragraph 1, ascribes to the Municipalities, through the Authorities of the field, the competence relative to the management of the municipal waste and assimilated considering urban waste ***"all waste from the sweeping of roads, or of any nature and origin, lying on roads and public areas or on roads and private areas subject to public use or on sea and lake beaches and on the banks of waterways"***.

→ ANNEX A

1. In the case of abandonment of municipal and similar waste on the banks of watercourses, the person institutionally responsible for the management, intended as collection, transport, recovery and/or disposal of abandoned waste, is the municipality in whose territory the discovery of the material occurred. This is without prejudice to the identification of the person/s responsible for the abandonment on whose head, in this case, the obligation to remove the material and restore the state of the places will be imposed;
2. On the other hand, in the case of waste floating on or transported on surface water which is recognised by the competent hydraulic authority as being harmful to the hydraulic regime of the surface water or which, in any event, may impair the operation of the water works, it will be up to these authorities (Civil Engineering Offices, Forestry Services or Reclamation Consortia), or the entity to which the management of the watercourse, the building or the hydraulic work, in the exercise of its supervisory functions, management and maintenance hydraulics, provide, assuming the relevant costs, the management of the waste found, understood as collection, transport, recovery and/or disposal of the same.
3. The intervention of collection, transport and disposal/ recovery by the municipalities is to be considered extended to cases of waste floating on surface water, or in them transported, which are not an obstacle to the hydraulic regime of the water stream concerned. So much so, in view of the fact that the water mirror is, in all respects, a public area that persists in the municipal territory and, therefore, to the present case the same discipline applies in the case of waste abandoned on the banks.
4. For waste consisting of carrion and/or carcasses of dead animals while recalling that pursuant to art. 185, paragraph 2, of Legislative Decree No. 152/2006, the special rules laid down in Regulation EC No. 1774/2002 of 3 October 2002 for the correct disposal of the same in specially authorised plants, the institutionally competent subject to the relative removal and the successive phases aimed at the correct elimination is the Municipality in whose territory the discovery of the material took place.

July 2020 - 2030 AGENDA FOR THE VENETO REGION: THE REGIONAL STRATEGY FOR SUSTAINABLE DEVELOPMENT – SUSTAINABLE VENETO

The drafting phase of the Regional Strategy in Veneto has followed a working method based on three pillars and nine regional guidelines: they summarize the process towards a more coherent and integrated *multi-level governance* of *sustainable development* in its three dimensions, social, economic and *environmental*.

Pillars	A. Vision and Leadership	B. Participated processes	C. Impact
Guidelines	Political commitment and leadership	Coordination between levels of government	Budgetary policy aligned with sustainable development objectives
	Medium to long-term strategic vision	Proactive involvement of stakeholders	Continuous adaptation to the effectiveness of adaptation and mitigation actions
	Integration of sectoral policies by matrix work	Proactive participation of citizens, especially young people	Reporting and impact assessment of programmes

Per rafforzare coerenza, unitarietà e integrazione della propria governance dello sviluppo sostenibile, la Regione del Veneto ha agito sviluppando varie azioni interne ed esterne, tra cui:

1. Agreement with the Ministry of the Atmosphere and the Protection of the Sea, that it has financed all the regions to the aim to give support and coherence between the various regional strategies and that national one;
2. Regional planning: the work for the definition of the Strategy has previously concerned the verification of the coherence between the 17 Goals of the 2030 Agenda and the planning and programming acts and the **Document of Regional Economy and Finance (DEFR) 2020-2022** with the relative strategic and managerial objectives, from which already emerges an important attention of the Region towards the sustainability;
3. Institutional agreement between the Veneto Region, ARPAV and the University of Padua for the involvement of civil society in a coherent, integrated and participatory path of development of ideas and proposals for sustainable development, also with an action dedicated specifically to the school world;
4. Memorandum of Understanding for the Sustainable Development of Veneto: the Veneto Region has signed a Memorandum of Understanding for a Sustainable Veneto with over 230

subjects, including municipalities, public companies, universities and research bodies, associations and companies. The Protocol commits all subscribers to strengthen their actions and partnerships for the sustainable development of the territory;

ANNEX A DGR n. 988 del 09 agosto 2022 - UPDATE WASTE PLAN REGION OF VENETO

One of the last innovations in the field of waste in the Veneto Region is represented by the Update of the Waste Plan which took place at the beginning of August 2022.

In particular, the following articles are relevant:

Art. 20 - Provisions on litter lying on maritime and lake beaches and on the banks of waterways

- The Regional Council shall define by special resolution the criteria for access to regional funding by municipalities taking into account the main factors influencing costs, such as, by way of example, for maritime and lake beaches, the length of the coastline, the presence of river mouths in the municipal territory and the extent of the catchment area afferent to them, the occurrence of extraordinary bad weather events and possibly also the best results of waste collection and management.

-Costs arising from the collection and sending for recovery or disposal of municipal waste lying on the banks of waterways or floating impediment to hydraulic regime shall be shared among the municipalities pertaining to the same hydrographic network.

- Excluded from the calculation of the separate collection percentage pursuant to Article 205 of Legislative Decree No.

152/2006 as amended and Art. 39 of R.L. No. 3/2000 as amended "waste of any nature or origin, lying on public roads and areas or on private roads and areas however subject to public use or on maritime and lake beaches and on the banks of waterways."

Art. 27 – Combating littering and measures to contain plastic waste dispersal

-In order to boost the fight against plastic waste littering that reaches the sea, the Region promotes the conclusion of agreements between entities responsible for surface water bodies (Basin Councils and the Reclamation Consortia...) with the aim of coordinating the various activities carried out, including cleaning and grass mowing activities, in order to avoid phenomena of the disintegration of abandoned waste by the mechanical means used for green maintenance.

- Basin councils and/or public service management bodies must provide specific activities to awareness raising to combat litter abandonment.

-Region defines the operational modalities for implementing the provisions of the Salvamare Law (60/2022).

Plan Goals par. 3 1st Action Objective 1 - Containment of plastic waste generation and dispersion. MICROPLASTIC

Regarding single-use plastics and microplastics, the **PRGR-Regional Waste Management Program** must take targeted control and containment actions particularly to promote initiatives related to reducing the use of plastic products.

The United Nations Environment Assembly then adopted the "**Resolution on Marine Wastes and Microplastics**" in late December 2017, in line with Sustainable Development Goal 14.1, which aims by 2025, to "**prevent and significantly reduce marine pollution of all kinds, particularly from land-based activities, including marine debris and nutrient pollution.**"

2023

GPP: Green Public Procurement

The GPP is an environmental policy instrument that aims to foster the development of a market for products and services with a reduced environmental impact through the public demand lever, contributing, in a decisive way, the achievement of the objectives of the main European strategies such as the efficient use of resources or the Circular Economy. The public authorities, LIKE Veneto Region, that undertake GPP actions are committed both to rationalize purchases and consumption and to increase the environmental quality of their supplies and entrustments. The objectives of the GPP are:

- **Reduction of environmental impacts**
- Protecting and improving the competitiveness of enterprises
- Stimulating innovation
- Rationalisation of public expenditure
- **Dissemination of sustainable consumption** and purchasing patterns
- **Efficiency and saving of natural resources, in particular energy**
- **Reduction of waste produced**
- Reduction of use of hazardous substances
- **Integration of environmental considerations into other policies of the body**
- Improving the image of public administration
- Increasing the skills of public purchasers

Via Resolution of the Regional Council no. 581 of 19 May 2023, The Region of Veneto has published a document of guidelines on plastics, updated in May 2023 and entitled: "**GPP AND PLASTICS GUIDE TO RESPONSIBLE CONSUMPTION AND PRODUCTION**" – in reference to Goal 12 of the 2030 Agenda [Ensuring sustainable consumption and production patterns]. È possibile visionare il documento al seguente link:

<https://www.regione.veneto.it/web/gpp/protocollo-regione-del-veneto>

<https://drive.google.com/file/d/1-KvVRpESl6VI5Fn0E27HJaxaWPqoJdQr/view>

2017

REGIONAL MUNICIPAL WASTE MANAGEMENT PLAN

Article 199 of Legislative Decree 152/2006, previously described in the legislative train of the Italian national legislation, establishes the general contents of the Regional Waste Management Plan and assigns responsibility for its preparation and adoption to the Regions and the obligation to update it at least every six years.

Depending on the multiplicity of contents provided for by Article 199 of Legislative Decree 152/2006, the articulation of the Regional Waste Management Plan in separate documents was assessed. In order to obtain a more flexible tool because it is already divided into separate parts by topic. Pursuant to Regional Law No. 34 of October 20, 2017 "Organic regulation of waste management and principles of circular economy," the plan is divided into the following autonomous sections:

- *Regional waste prevention programme*
- *Location criteria for waste recovery and disposal facilities*
- **Regional guidelines for the management of stranded waste and road sweeping;**
- *Regional special waste management plan*
- *Regional plan for remediation of contaminated sites*
- *Regional Plan Asbestos*
- *Regional guidelines for health waste management*
- **Regional Urban Waste Management Plan - Update 2022 and related Annexes, approved with d.p.reg. n.088/Pres. of 15 July 2022;**
- *Method for calculating the percentage of separate collection of municipal waste in the Friuli Venezia Giulia region*
- *Regional guidelines for the management of construction and demolition waste;*
- *Regional guidelines for the implementation and management of reuse centres*
- *Scheme for municipal waste management and related waste*

Of particular interest are the highlighted documents

2016

REGIONAL GUIDELINES FOR THE MANAGEMENT OF STRANDED MATERIAL - Resolution of the regional council 15 January 2016, n. 40

The Regional Guidelines for the Management of Stranded Material have been drawn up to ensure that the management of the material does not affect the conservation of natural habitats and biodiversity. They also aim to allow the use of state property areas for tourism and recreation, while avoiding coastal erosion and reducing, as far as possible, the production of waste. The guidelines aim to provide municipalities and managers of state-owned areas for tourism and recreation of operational indications to facilitate the management of beached material, given the objective difficulty encountered by the same subjects.

The guidelines are organized as follows:

1. Premise
2. Regulatory framework
3. Definitions of reference
4. Objectives of the guidelines
5. Description of marine flora

6. **Management of stranded material**
7. Communication and incentives

However, the collection and management of this stranded material depends on its nature and origin. For simplicity we distinguish the following types of materials that can be beached on the coast:

- **organic material, such as marine plants and algae;**
- **waste of anthropogenic origin;**
- timber transported by storms and exceptional weather events.

Therefore depending on the aforementioned beached materials, different modes of operation can be implemented.

Remove and transfer beached waste to landfills. This solution, which from an environmental point of view is the worst solution, is implemented where it is not possible to manage the beached material through reuse or recovery operations. The material is classified and managed as urban waste in accordance with Legislative Decree 152/2006 and does not require prior sorting to separate the man-made waste. However, the collection of beached waste from the beach must be done by taking all necessary precautions to avoid the simultaneous removal of sand or pebbles.

Anthropogenic waste beached on state-owned areas for tourist use must be managed in accordance with Legislative Decree 152/2006. The collection of anthropogenic beach waste from the strand must be carried out by taking all necessary precautions to avoid the simultaneous removal of sand or pebbles.

2016

REGIONAL WASTE PREVENTION PROGRAMME

By Decree of the President of the Region of 18 February 2016, No. 034/Pres, the **Regional Waste Prevention Programme** was approved, an integral part of the **Regional Waste Management Plan**, described above. The programme, structured on the basis of the information provided by the specific guidelines of the European Commission, proposes a series of actions to be developed on the regional territory with the involvement of all stakeholders identified from time to time. The proposed actions derive from the best experience of waste prevention prevention in Italy and in the region and should be promoted through appropriate information, promotion and regulation tools. Several actions are identified by the Regional Programme for the Prevention of Waste Production; the most important ones are summarized in the following table:

About	Actions	Waste stream
food waste	Reduction of domestic waste, withdrawal of food close to expiry at the commercial distribution	biodegradable
biodegradable waste	Self-Setting, reuse stranded algae, use of heatsinks	biodegradable
packaging	Diffusion of bulk products, short supply chain proposal, diffusion of eco-design, reusable packaging proposal	biodegradable

single-use	Proposal for sustainable events	undifferentiated
hazardousness of waste	Recovery of unsold pharmaceutical products, use of rechargeable batteries	selective collection
green public procurement	Application of minimum environmental criteria - CAM	various

In order to evaluate the effectiveness of certain actions and to facilitate their dissemination, the Plan regulates the management of waste and polluted sites by fielding some activities, such as:

→ Recognition of innovative projects developed by regional companies in the use of packaging:
 the aim of the initiative was to highlight the "good practices" in the use of packaging for aspects such as recyclability, reusability, organic recovery capability, environmental product certifications, environmental management, weight/volume ratio reduction and design innovations. The indicators have been verified for the companies of Friuli Venezia Giulia, contacted directly or through the trade associations.

→ Survey on the widespread use of bulk products:
 The aim of the initiative has been the recognition of the diffusion of the distribution of loose products in the regional territory and the evaluation of the benefits and criticalities deriving from this practice.

→ Activation of the self-check at schools:
 The activities carried out for educational purposes and for experimental purposes, in schools equipped with canteen services. Specific agreements have been signed with the municipalities of Udine, Codroipo and Pordenone, for a total of seven schools involved. Each institution was provided with a 1000-litre compost bin, which was made available to various municipal waste management companies in the municipalities involved in the project.

2022
REGIONAL MUNICIPAL WASTE MANAGEMENT PLAN. UPDATE 2022

The FVG Region has defined a clear guideline in waste management on the regional territory. Since art. 199 of Legislative Decree 152/2006 assigns to the Regions the planning competence in the field of waste, with resolution of the Regional Council 30 November 2018, n. 2279, published in BUR n. 51 of 19 December 2018, the process of strategic environmental assessment of the update of the Regional Urban Waste Management Plan has been started and the relative operating modalities have been defined.

Following the comments received from environmental stakeholders, a critical analysis of the observations and contributions received during the preliminary consultations was carried out and the Draft Regional Management Plan for municipal waste - Update 2022, the Environmental Report and its Non-technical Summary.

In the Strategic Environmental Assessment consultation phase (deadline February 19, 2022), 11 opinions were received and accepted for evaluation. Among the opinions received was one from the Ministry of Ecological Transition, which, after careful examination of the various parts of the plan, expressed particular appreciation for the work done.

Final adoption of the Regional Municipal Waste Management Plan took place by Resolution No. 753 dated May 27, 2022.

More information can be found on the Friuli Venezia Giulia Region website at the following link:

2. Marine Litter Issues in the Republic of Croatia

Croatia is a member and signatory of a number of global and regional conventions, from UNCLOS and MARPOL to the Barcelona Convention. On a European Union (EU) level, it has an obligation to implement EU directives on marine protection. Unfortunately, the existing international and national legislation regarding marine litter is not applied in practice at a satisfactory level. Activities related to the prevention of marine litter are carried out through the existing legal framework and strategic documents related to landbased waste management. The legal act incorporating issues of marine litter in Croatia is the Umbrella Act on Sustainable Waste Management, where marine litter is considered a special category of waste (Art. 53). The most important EU directive on these issues is the Marine Strategy Framework Directive (MSFD), which establishes a framework for community action in the field of marine environmental policy. Member states were obligated to take measures to achieve or maintain good marine environmental status (GES) by 2020, including those related to marine litter, as one of the important pressures on the marine environment. Croatia transposed obligations from the Marine Strategy Framework Directive into national legislation. Furthermore, it adopted the program of measures for protection and management of the marine environment and coastal area, which determines the measures necessary to achieve and/or maintain good environmental status as well as measures to achieve the objectives of marine environment and coastal zone management. The program of measures includes key measures connected to the implementation of pilot actions for cleaning and disposing of marine litter, i.e., the collection of litter both from the coast and from the sea both through diving actions and trawling. The so-called “Fishing for Litter” initiative aimed at reducing the amount of marine litter on the seabed by including one of the key stakeholders—the fishery sector. Efforts to remove marine litter deposited on the coast and on the seabed were mainly focused on conducting local environmental actions with the participation of volunteers from NGOs and diving clubs. However, they were carried out without harmonized coordination, methodology, and analysis of the quantities collected. Therefore, the data collected are not comparable, and it is difficult to draw appropriate conclusions about the previous or current situation and clearly follow the trends.

Fisheries as a sector can make a significant contribution to the removal of marine litter accumulated on the seabed. “Fishing for Litter” practices refer to the collection of marine litter found as by-catches in nets during trawl fishing, and its disposal on shore in appropriate containers and subsequent disposal within existing waste management systems. It is estimated that significant amounts of litter ending up in the sea each year could be removed in this way. Since we do not have the data on the amount of marine litter accumulated on the seabed or the amount of its input, such efforts are certainly worthwhile. If such an initiative were implemented in the entire Croatian part of the Adriatic, it could act as a significant program and a measure to reduce the total amount of marine litter. However, undefined legislation and obscure bureaucracy, the lack of an organized management and accountability structure, and the lack of funding sources are obstacles yet to be surmounted. This approach leaves the success of this initiative subordinated to personal initiative and different stakeholders’ willingness to collaborate, thus seriously affecting the potential for its

long-term implementation. Although since 2017 continuous monitoring has been conducted of marine litter from different compartments (beach, floating, deep seafloor litter and beach sediment, and microplastics ingested by fish), the data collected are still not sufficient for a broader assessment of the existing status and trends. As previously stated, most of the existing published data come from scarce and spatially dispersed scientific research or cleaning actions carried out off-season mainly on beaches at the initiative of local governments, counties, or concessionaires, as well as individual actions of environmental NGOs (such as “Sunce,” “Green Action,” etc.). There are also activities of removing marine litter through certain actions of scuba diving clubs. Such scuba diving environmental actions are usually initiated for the removal of larger bulky waste along the shores and waterfronts of smaller settlements. Such voluntary initiatives of cleaning beaches and scuba diving environmental actions are part of the regular seasonal activities the NGOs conduct in cooperation with local governments. These activities are carried out to preserve habitats and increase the awareness of the local community about the problem of marine litter on the beaches and seabed, and to promote sustainable solutions for the preservation of the natural marine environment. Non-governmental organizations are better acquainted with the marine litter problems in the field because they have grown out of the needs of local communities. In addition, they are not dependent on inappropriate needs of state plans and are very resilient to changes in activity planning, unlike government ministries that implement changes very slowly. Despite many years of practice and acquired experience, unfortunately, no assessment of the potential and strengths of the NGOs and citizen science actions has been made in Croatia. Although clean-up operations are carried out on a regular annual basis across the coast and islands, in almost every small town, there is still no organized collection and storage of data that could be used in the future. Systematic coordination of such marine litter collection activities has not been developed, nor have a recording and monitoring of the data on the composition, spatial distribution, and potential sources of the thus collected litter been developed. In most cases, the data collected were reported as the total amount of marine litter collected by type of material without further classification of the types of items. Certainly, with the application of appropriate protocols, methodology, and training, citizen scientist volunteers can make a significant contribution to marine litter data collection and such efforts can improve the national research program. Given the social benefits of community engagement, this could be a very valuable investment in environmental protection that can be agreed upon between the state administration and interested members of the public [53]. It is certainly advisable for Croatia to plan such an investment. In the current context of limited funding, unfortunately, limited guidelines of good practice have been established, and many activities are carried out without a structured and systematically organized plan. Therefore, many projects face challenges, usually due to the lack of funding, logistical constraints, lack of participant motivation, and/or lack of data. Regarding raising awareness of the role of NGOs in marine litter, which is an important measure in the fight against marine litter in the EU, Croatia has not yet directed its policy to a more efficient cooperation with NGOs. The lack of strong and organized state support has led to the fact that citizen science is still at very low organizational levels. It has not taken strong enough root and has practically not gained due value.

Cross-border effects of marine litter are already a known issue of marine litter in Croatia, with floating marine litter traveling regardless of the state or administrative borders. The DeFishGear project recognized the importance of a regional approach to addressing marine litter as a transboundary problem of multi-stakeholder engagement, coordination, and cooperation, and stressed the need to strengthen the science-policy interface, harmonize monitoring and methodologies, and prioritize a whole marine litter cycle approach. However, despite the numerous international and regional initiatives providing a platform for cooperation and coordination of marine litter issues, and despite several bilateral state meetings at the highest political level, the continuous arrival of transboundary marine litter points to the lagging of cooperation and to the insufficiency of state efforts in these initiatives. Countries bordering the Adriatic Sea do not have adequate waste management schemes due to various economic constraints, although some of them have recently banned the use of plastic bags. Poor cooperation and insufficient involvement of particular border states in international/regional initiatives are the main causes of this problem.

2.1. Obligations to the EU

Based on the obligations from the Marine Strategy Framework Directive, which have been transposed into national legislation within the process of drafting and implementing the Marine Environment and Coastal Zone Management Strategy, Croatia had the obligation of conducting the following processes through adequate documentation: Determine the existing situation with marine litter (assessment of quantities, composition, distribution, and sources of marine litter in relation to sea sections, on beaches, on the sea surface, and on the seabed, as well as microplastic on the sea surface, in sand sediment, and in fish), determine the good state of the marine environment with marine litter as a pressure (GES), determine targets related to marine litter, develop and implement monitoring of marine litter, and define and implement measures related to marine litter. Considering the knowledge gained from the implementation of the first cycle of the strategy, it can be said that it was not possible to determine the existing status and trends for marine litter descriptors in the Croatian Adriatic since knowledge about the state, quantities, properties, and impacts of litter on the marine environment is currently insufficient. Therefore, in addition to the broader goal of the strategy related to the overall reduction of marine litter in the Croatian part of the Adriatic, it was concluded that it is necessary to further develop indicators and methodological approaches for monitoring the quantities and trends of litter and micro litter/micro plastic on the seabed, the stomach contents of marine organisms, and the levels of its impact on marine ecosystems and humans. Two adopted action programs, the Monitoring and Observation System for Continuous Assessment of the State of the Adriatic Sea and the Program of Measures for the Protection and Management of the Marine Environment and Coastal Zone, confirmed the lack of key information to assess the situation and pressures in terms of marine litter descriptors, and defined criteria and methodological starting points for monitoring marine litter. It should be noted that the legally binding UNEP MAP Regional Marine Litter Management Plan in the Mediterranean was considered when defining measures related to marine litter. Unfortunately, Croatia currently does not have a systematic model for marine litter management, and neither it is able to determine the amount of litter that reaches it. A strategic document/a legal act exclusively relating to such litter has not yet been adopted. Activities related to the prevention of such litter are carried out

through the application of the current legal framework and strategic documents dealing with waste management.

2.2. Marine Litter Monitoring in Croatia According to EU Obligations

Until 2017, Croatia did not systematically collect and record data from field research related to marine litter. However, since mid-2017, Croatia has been implementing a systematic model for monitoring all elements of marine litter. This includes the litter deposited on beaches, floating on the sea surface, and sunk on the seabed, as well as microplastic in sandy sediment on beaches, the sea surface, and in the digestive tract of fish, all as part of the Monitoring and Observation System for Continuous Assessment of the Adriatic Sea. During this period, monitoring and observation activities of the parameters required for the assessment of the status of the descriptor D10—Marine Litter of the Marine Strategy Framework Directive [50] were carried out. These activities were successfully implemented on the Croatian side of the Adriatic for the first time according to the defined implementation methodology. The monitored parameters were as follows: (a) quantity and composition of bulky waste deposited on the shore; (b) quantity and composition of bulky waste on the surface and on the seabed; (c) quantity, distribution, and composition of microplastic on beaches and the sea surface; and (d) quantity and composition of ingested marine litter. All predicted parameters were monitored at designated locations by implementing a specific methodology that depended on the individual group of litter being observed/monitored and included the determination and analysis of the status of the predicted indicators. However, due to insufficient financial resources during 2017 and 2018, sampling and subsequent analyses were performed on a smaller scale than the action program Monitoring and Observation System for Continuous Assessment of the Adriatic Sea envisaged.

Given the lack of a previous systematic database as well as the short period of the systematic monitoring program, the knowledge on marine litter in Croatia is still insufficient. One of the main shortcomings of the evaluation of the previously mentioned parameters in relation to the environmental impact is the undeveloped system of limit values, which is also expressed at the EU level. Therefore, at the moment, it is not yet possible to express reliable qualification of a possible degree of burden. However, comparing the results obtained by all monitored parameters with the existing preliminary data from the DeFishGear project, and those available for the Mediterranean area, it is possible to estimate that the monitored data are below the stated values for these areas. The data are insufficient for a broader expert assessment of the state of this parameter, given that, due to the lack of financial resources during 2017 and 2018, sampling and subsequent analyses were performed in a shorter period of time than expected.

The results of monitoring all parameters were entered into the structure of the existing indicators database (<http://baltazar.izor.hr/azopub/bindex>) (accessed on 22 April 2021), which will still need additional adjustment due to the specific structure and peculiarities of individual parameters. All results were recorded and prepared in the form and values recommended by the EC MSFD Technical Subgroup on Marine Litter (TG10) Guidance on Monitoring of Marine Litter in European Seas [56], according to the draft “UNEP/MAP MEDPOL Monitoring Guidance” document on Ecological

Objective 10: Marine Litter (2014), whose applicability on the Croatian coast was tested in the field through the DeFishGear project.

Specific regulations regarding marine litter

2011

Regulation establishing a framework for action of the Republic of Croatia in the field of marine environment protection (Official Gazette 136/11)

With the adoption of this Regulation, as well as the later added **Regulation on Development and Implementation of Documents of the Strategy for Marine Environment and Coastal Area Management** (Official Gazette 112/14, 39/17, 112/18), the **Marine Strategy Framework Directive 2008/56/EC** was transposed into the national legislation. The decree regulates the starting points and benchmarks for the creation, development, implementation and monitoring of the implementation of the MSFD, which has its legal obligation in the *Environmental Protection Act* (Official Gazette 80/13, 78/15, 12/18, 118/18). The main purpose of the Directive transposed by this Regulation is to achieve and maintain a good environmental state (GES) of the marine environment by 2020 through the achievement of the general objectives of the protection of the marine environment, which include:

- protection, preservation, recovery and restoration of marine and coastal ecosystems and sustainable use of ecosystem services;
- preservation of marine protected areas and ecologically significant EU NATURA 2000 sites;
- reducing the pollution in the marine and coastal environment in order to preserve the human and ecosystem health, and to enable the use of the sea and the coast;
- establishing and/or maintaining a balance between human activities and natural resources by applying an ecosystem approach.

As part of the Strategy, a number of preparatory documents and action programs were adopted:

- Initial assessment of the marine environmental condition (July 2012)
- Good environmental status (GES) of the marine environment and a set of environmental protection goals with related indicators (October 2014)
- Socio-economic analysis of the use, as well as the cost of deterioration, of the marine environment and the coastal area (June 2015)
- Updated Strategy documents (September 2019)
- Monitoring and observation system (October 2014)
- Program of measures for marine environment and coastal area management (October 2017)
- MSFD action program - Monitoring and observation system for continuous assessment of the state of the Adriatic Sea 2021-2026 (March 2021)

2021

Waste Management Act (Official Gazette 84/21)

With the entry into force of this Act, the Sustainable Waste Management Act (Official Gazette 94/13, 73/17, 14/19, 98/19) ceased to be valid. This is the first legal document in the Republic of Croatia that defines the issue of marine litter. And that through:

Art. 4.

- marine litter means waste in the marine environment and coastal areas in direct contact with the sea, which is generated by land-based or sea-based human activities, and is found on the sea surface, within the water column, on the seabed or as tidewrack.

Art. 89.

(1) The provisions of the regulations governing maritime affairs shall apply to the collection, hand-over and acceptance of waste generated by maritime objects and shipping cargo debris, into port reception facilities.

(2) The monitoring of marine litter shall be carried out as part of the operations of the sea reference centre programme framework, in accordance with the Regulation governing environmental protection.

Art. 113. Decision on the prevention of waste discarding

(1) The representative body of the local self-government unit shall issue a decision on the prevention of waste discarding that contains measures for the prevention of illegal waste discarding and measures for the removal of illegally discarded waste, and where applicable, measures for the removal of marine waste.

(2) The measures referred to in paragraph 1 of this Article include the recording of the locations of illegally discarded waste and the establishment of a system for receiving reports on discarded waste.

Art. 181. as the part of the transitional and final provisions

(5) The measures for the achieving of a reduction of the consumption of single-use plastic products stipulated on the basis of this Act and the by-laws adopted pursuant thereto, must be an integral part of the plans or programs of measures established in accordance with special regulations governing the protection of water, the marine environment and maritime affairs, when these plans or programs are next updated.

2021

Directive (EU) 2019/904 of the European Parliament and of the Council

SUP Directive on the reduction of the impact of certain plastic products on the environment introduces new obligation sets of data to be monitored and collected, targeting single-use plastic products most often found on beaches, as well as lost and abandoned fishing gear. Member state should monitor consumption of these single-use products as well as the measures taken and report the progress made to the EC. Also, SUP Directive foresees the producers to cover the costs of waste management clean-up, data gathering and awareness raising for certain products.

At the Croatian national level, SUP directive has been transposed by new **Act on Waste Management** adopted in 2021, but the detailed provisions are to be adopted in following period.

Literature

- Croatian Parliament. Act on Sustainable Waste Management. Official Gazette, 2013, (94); 2017, (73); 2019(14); 2019, (98). Available online: <https://www.zakon.hr/z/657/Zakon-od-odr%C5%BDivom-gospodarenju-otpadom> (accessed on 10 March 2021).
- Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive). OJL 2008, 164, 19–40.
- Ministry of Environmental Protection and Energy of the Republic of Croatia. Program of Measures for the Protection and Management of the Marine Environment and Coastal Zone, Zagreb, Croatia. 2017. Available online: https://mingor.gov.hr/UserDocsImages/Uprava_vodnoga_gospodarstva_i_zast_mora/Strategija_upravljanja_morem/program_mjera_zastite_i_upravljanja_morskim_okolisem_i_obalnim_podrucjem.pdf (accessed on 10 March 2021).
- Škevin Ivošević, B. Marine litter. J. Hrvat. Vodoprivr. 2018, 222, 85–89.
- Government of the Republic of Croatia. Action Program of the Marine Environment and Coastal Zone Management Strategy: Monitoring and Observation System for Continuous Assessment of the Adriatic Sea. Official Gazette, 2014. Available online: <https://narodne-novine.nn.hr/clanci/sluzbeni/dodatni/434153.pdf> (accessed on 8 March 2021).
- UNEP. Regional Plan for the Marine Litter Management in the Mediterranean. 2013. Available online: <https://www.cbd.int/doc/meetings/mar/mcbem-2014-03/other/mcbem-2014-03-120-en.pdf> (accessed on 8 March 2021).
- MSFD Technical Subgroup on Marine Litter. Guidance on Monitoring of Marine Litter in European Seas: A guidance document within the Common Implementation Strategy for the Marine Strategy Framework Directive; European Commission, Joint Research Centre: Luxembourg, 2013; p. 128.