



# **Table of abbreviations**

BCRS	Beverage Container Refund Scheme
ЕСНА	European Chemicals Agency
E-NGO	Environmental Non-Governmental Organisation
EOW	End-of-Waste
EPR	Extended Producer Responsibility
ERA	Environment and Resources Authority
ESM	Environmentally Sound Management
EU	European Union
IMO	International Maritime Organisation
MCAST	Malta College of Arts, Science and Technology
MCCAA	Malta Competition and Consumer Affairs Authority
MCST	Malta Council for Science and Technology
MESDC	Ministry for the Environment, Sustainable Development and Climatic Change
MHRA	Malta Hotels and Restaurants Association
MIA	Malta International Airport
MSFD	Marine Strategy Framework Directive
MTA	Malta Tourism Authority
NSO	National Statistics Office
PET	Polyethylene Terephthalate
RRRA	Resource, Recovery and Recycling Agency
SUP	Single-use Plastics
UOM	University of Malta
WFD	Waste Framework Directive

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PREFACE

Following the extensive work being carried out by the European Commission on moving towards a Circular Economy, the Single-use Plastic Products Strategy for Malta will be a means which will further help the transition for Malta to move towards a more circular economy and hence closing the loop of products' lifecycles. This strategy will help protect our environment and human health from plastic pollution while reducing litter and consumption of single-use plastic products, and increasing the quality and quantities of single-use plastic waste collected and recycled.

This strategy is a framework acting as a driver that is also intentioned to bring about a cultural and behavioural shift within society in terms of its attitude toward single-use plastic products. The measures highlighted in the strategy should not just be introduced as legislation but should be followed up by further discussions with the various stakeholders, and accompanied by educational and awareness-raising campaigns, in order to ensure that a positive change is brought about. This will ensure that a cultural shift takes place and that the public are aware of the potential benefits that moving away from single-use plastics can have on their everyday life. Providing only a change in legislation does not ensure compliance and will not bring about the essential behavioural change to yield positive results.

The Single-use Plastic Products Strategy for Malta should be viewed as an opportunity which will set the path towards a plastic-free environment. It is to be updated, through periodical review, to ensure that any changes in society's attitude and items containing single use plastic are addressed



# **INTRODUCTION**

# 2.1 CONTEXT - OBJECTIVE AND SCOPE

Materials made of, or containing plastics are present in many aspects of our daily activities and they constitute an important element of our economy. On the other hand, the biggest challenge faced is that they have **low rates of reuse**, **recovery and recycling** when compared with other recyclables (i.e. paper, metals and glass) The majority of plastic waste streams result in being disposed of in a landfill or incinerated, and littered, hence ending up in the oceans due to an incorrect disposal method and lack of collection.

The aim of the strategy is to provide measures to:

- 1. Reduce consumption of single-use plastic (SUP) products, and
- 2. Increase the quality and quantities of Single-Use Plastic waste collected for recycling.

The Strategy shall aim to ensure the protection of the environment and human health from plastic pollution.

# What is a single-use plastic product?

A SUP product is a product that is made wholly or partly from plastic and that is not conceived, designed or placed on the market to accomplish, within its life span, multiple trips or rotations by being returned to a producer for refill or re-used for the same purpose for which it was conceived.

Source: European Plastics Strategy





2.2
EUROPEAN
STRATEGY
FOR PLASTICS
IN A CIRCULAR
ECONOMY

The European Strategy for Plastics, adopted on January 16, 2018 aims to protect the environment from plastic pollution whilst fostering growth and innovation, as part of the transition towards a more circular economy.

The European Union (EU) identifies **single-use plastics as one of the main plastics of concern** since consumption of single-use plastic items keeps increasing. Most of these single-use plastic products are not recyclable. Single-use plastic items include a variety of commonly used items that are prone to littering since they are often used away from home, such as small packaging, lightweight plastic bags, disposable cups, food containers, beverage bottles, cigarette filters, lids and cutlery among others.

The European Strategy notes that the use of this type of plastic is widespread in Europe and it is estimated that single-use plastic items currently constitute around **50% of beach litter**.

**Action Plan** for a Circular Economy ADOPTION: DECEMBER 2015 **IDENTIFIED PLASTICS AS A KEY PRIORITY** - ADOPTION: DECEMBER 2018 **European Strategy** for Plastics **IDENTIFIED** Proposal for a Directive of the **SINGLE-USE PLASTICS AS A KEY PRIORITY European Parliament and of the Council** on the reduction of the **PUBLISHED FIRST DRAFT:** impact of certain plastic products 28<sup>TH</sup> MAY 2018 on the environment

FIGURE 1 Steps taken at EU-level to date to tackle single-use plastics. Source: Environment and Resources Authority (ERA)

The Annex to the European Strategy lists a number of measures that the EU will focus on when implementing it, with the following overarching **milestones**:

- 1. All plastic packaging on the EU market will be recyclable by 2030;
- 2. The consumption of single-use plastics will be reduced; and
- 3. The intentional use of microplastics will be restricted.

The European Commission identifies that additional and more targeted action is needed to complement waste laws and remove barriers that are specific to the plastic sector, since there is a lack of alternatives on the market and currently no clear incentives for consumers and producers to switch to solutions that would generate less waste.

Furthermore, the European Commission recognizes the need to **develop a European market for recycled plastics**. The measures to implement can be categorized under the following sub-headings:

- 1. Improving the economics and quality of plastics recycling through improving product design, boosting recycled content and by improving the separate collection of plastic waste.
- 2. Curbing plastic waste and littering through reducing single-use plastics products, tackling both land-based and sea-based sources of marine litter, monitoring and curbing marine litter more effectively, curbing microplastics pollution and through evaluating the environmental impacts of compostable and biodegradable plastics.

# **Microplastics**

They are synthetic, water-insoluble polymer items smaller than 5mm, which are considered to be of particular concern for the aquatic environment. Microplastics come from degradation of larger plastics (such as single-use plastic items) or from intentional addition in a number of products, as cosmetics, detergents, paints, etc.

Source: ECHA

- 3. Driving investment and innovation towards circular solutions by providing guidance on the eco-modulation of EPR fees, and direct financial support amongst others.
- 4. Harnessing global action through multilateral initiatives, bilateral cooperation and supporting the development of international industry standards amongst others.

The goal of the European Strategy for Plastics is to protect the environment whilst at the same time create the foundations for a new plastics economy, where design and production fully respect reuse, repair and recycling needs and more sustainable materials are developed.

# 2.3 LEGISLATIVE INSTRUMENTS THAT AIM TO ADDRESS PLASTIC WASTE

The current policy and regulatory framework which targets plastic waste and marine litter is vast and can be found at many levels: International, European and National.

At an **International level**, various countries and governments are part of a number of agreements, which target different areas. The areas vary significantly, with for example: the MARPOL

Convention under the International Maritime Organisation (IMO), which focuses on the discharge of all types of garbage into the sea from ships. The Basel Convention provides an Environmentally Sound Management (ESM) toolkit to contribute to the achievement of the Sustainable Development Goals. Agenda 2030 for Sustainable Development, adopted by the United Nations General Assembly in September 2015, includes a general target that by 2025, marine litter of all kinds should be prevented and significantly reduced in particular where it originates from land-based activities.

At an **EU-level**, there are a number of policies and legislation which target different pathways. products and/or waste streams, however these are generally fragmented and have not had the necessary impact, especially to address single-use plastic products and their impact on the marine environment. Within this context, the Union water legislation, namely the Water Framework Directive and the Marine Strategy Framework Directive (MSFD), as transposed into national legislation by the Water Policy Framework Regulations, S.L. 549.100 and the Marine Policy Framework Regulations, S.L. 549.62, respectively, are the most horizontal piece of legislation, which has explicit focus on marine litter and reducing its impacts. A limitation of the MSFD is that it leaves the scope and ambition of measures up to the individual Member States. In addition, the Port Reception Facilities Directive provides systems for the delivery of waste from ships, including the return of fishing gear to shore for collection and treatment.

The waste legislation provides for ambitious recycling targets for various waste streams, however such targets can be achieved without tackling the litter problem. The amended Waste Framework Directive 2008/98/EC provides for measures that will contribute to the prevention of litter as well as to reduce the generation of marine litter as a contribution to the UN Sustainable Development Goal 14 (to prevent and significantly reduce marine pollution of all kinds).

Directive (EU) 2015/720 as regards reducing the consumption of lightweight plastic carrier bags amending the Packaging and Packaging Waste Directive 94/62/EC is the only legal instrument, which is focused on a specific Single-Use Plastic product. The Directive obliges Member State to introduce measures in order to achieve a sustained reduction in the consumption of lightweight plastic carrier bags on a national level. Such measures may include the use of national reductions targets, maintaining or introducing economic instruments, as well as market restrictions.

The European Union is in itself a source of legislation, which has direct effect on the laws at **National Level**, being integrated into the Maltese legal system, by direct application or by transposition.

By having homogenous legislation within the EU Member States, similar objectives and targets are achieved and comparable terminology and methodologies are used across the Union.

At a **National level**, the Waste Regulations (S.L. 549.63) provide an overall framework for most waste streams, some of which are further managed through separate regulations such as S.L.549.43 – the Waste Management (Packaging and Packaging Waste) Regulations. In addition, the Waste Management Plan for the Maltese Islands – A Resource Management Approach 2014-2020 includes the Waste Prevention Programme, which provides measures to encourage **SMART shopping**.

Furthermore, the second Green Public Procurement National Action Plan 2019-2025 also contains measures, which aim to curb the use of single-use plastic products in the hospitality and catering services provided to Government.

# **Smart Shopping**

It is an action, which implies understanding the environmental implications of our choices as shoppers when purchasing goods.

Considerations like the following can assist us to make informed decisions:

- Purchase products that do not contain too much packaging;
- Purchase reusable and recyclable products, such as product which may be refilled:
- Purchase product made of recycled plastic;
- Avoid purchasing disposable products;
- Avoid the use of plastic carrier bags and make use of reusable shopping bags.

Source: Waste Management Plan for the Maltese Islands – A Resource Management Approach 2014-2020

# 2.4 SYNERGIES BETWEEN ALL STAGES OF PLASTIC PRODUCTS

The leakage of single-use plastic items in the environment depends on a number of **stages** in the life-cycle of the plastic products, as seen in Figure 2, mainly:

- Design and Production (D);
- Use and Consumption (C); and
- Waste Management (W).

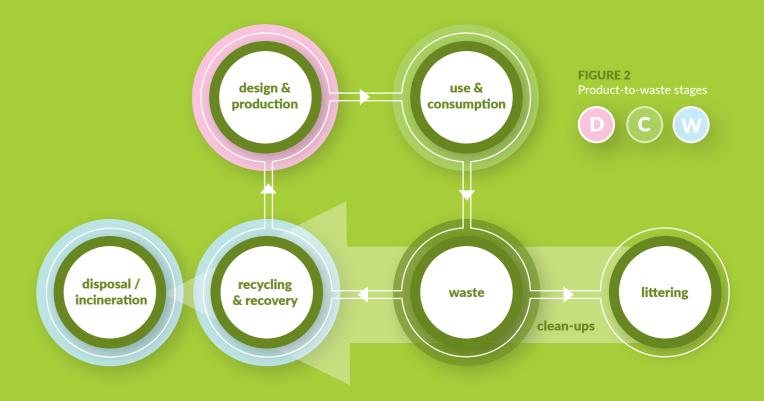
Leakage from the various stages can be tackled through a number of measures that go in line with the **Circular Economy** values and the **Waste hierarchy**:

- 1. Modifying the **product design** can:
- Prevent and reduce the waste generated;
- Improve the collection and management of the product when it becomes waste;
- Increase recycling rates if plastics with higher recyclability are used;

- Encourage the use of recycled plastic in the manufacturing process; and
- Encourage the substitution of plastic with alternative materials.

2. **Consumption patterns** depend on the level of knowledge that the public have on the negative impacts of consuming certain plastic products, incorrect disposal of certain plastic waste, and the importance of reuse and recycling. Such a change can be brought about through:

- Education and Awareness-raising campaigns;
- Labelling and marking of products;
- Introduction of economic instruments;
- Restrictions on placing on the market, and promoting sustainable alternatives; and
- Improved regulations and monitoring



- 3. The **waste stage** is an important link within the lifecycle of plastic and leakage from this stage can be reduced through improved Waste Management systems. Current practices can be improved through:
- Increasing the number of bins, especially in areas located close to the coast, to decrease the rate of littering. In addition, this should be accompanied by an increase in the frequency of collection and emptying of such bins.
- Improve the infrastructure for better separate collection of plastic products, which would help

- in increasing plastic recycling rates.
- Additional enforcement measures including penalties.
- Extended Producer Responsibility schemes in order to finance or finance and organise the:
  - Collection, transport and management of waste consisting of single-use plastic items;
  - Cleaning-up litter from certain areas (i.e. beaches and/or valleys); and
  - Awareness raising measures.

Stage of Single-Use Plastic product	Objectives	Actions/Measures
	<ul> <li>To prevent and reduce the plastic waste generated;</li> <li>To improve product design in order to</li> </ul>	Increase the use of recycled plastic in products.
D	<ul> <li>ensure its recycling and recovery;</li> <li>To increase the collection and recycling rates of plastics;</li> </ul>	Increase the use of recyclable plastic in products.
Design and Production	<ul> <li>To increase the recyclability of the product at the design stage;</li> <li>To improve the recycling industry and create a market for recycled plastics;</li> <li>To reduce the use of plastic and increase investment in alternative materials.</li> </ul>	Ensure no leakage of small plastic parts during the life-cycle of a plastic product e.g. lids.
Production		Increase the use of alternative materials instead of plastic.
		Education and awareness-raising campaigns.
	<ul> <li>To seek to change consumer's behaviour;</li> <li>To achieve a reduction in the consumption</li> </ul>	Easier access to information.
C	of single-use plastic products and fishing gear;  To increase public knowledge on the negative impacts of:  certain plastic products;  incorrect disposal of plastic waste; and	Labelling and marking.
		Introduction of economic instruments.
Use and		Provide alternatives.
Consumption		Restrict the availability of certain single-use plastic products.
	<ul> <li>the importance of reuse and recycling.</li> </ul>	Better regulations and monitoring.
	To made can interest a little in	Facilitate the process through which a material ceases to be waste.
W	<ul> <li>To reduce plastic litter;</li> <li>To reduce the amount of plastic waste landfilled;</li> </ul>	Improvement of the separation, collection and management systems of plastic waste.
	To increase the collection and recycling	Extended Producer Responsibility schemes.
Waste Management	rates of plastics;  To improve the recycling industry and	Easier access to information.
-Management	create a market for recycled plastics.	Improvement of enforcement measures.
		Ensure that adequate infrastructure is available.

**TABLE 1** Synergies between the stages in the life-cycle of plastic products

# **BACKGROUND AND STATUS**

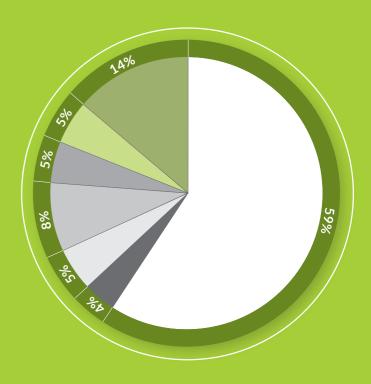
# 3.1 EUROPEAN SITUATIONAL ANALYSIS

### **3.1.1 PLASTIC WASTE IN EUROPE**

Acording to the European Strategy for Plastic in a Circular Economy<sup>1</sup>, it is estimated that Europe produces around 25 million tonnes of plastic waste every year, which raw material used for production is mainly fossil-fuel based.

It has to be highlighted that the largest fraction of plastic waste generated in the EU is **packaging material**. It is also a reality that various activities throughout the day contribute to the generation of other different waste streams of plastic waste (**Figure 3**).

<sup>1</sup>Source: Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions, A European Strategy for Plastics in a Circular Economy



- packaging 59%
- non-packaging household 4%
- construction & demolition- 5%
- electrical & electronic equipment 8%
- automotive 5%
- agriculture 5%
- **others 14**%

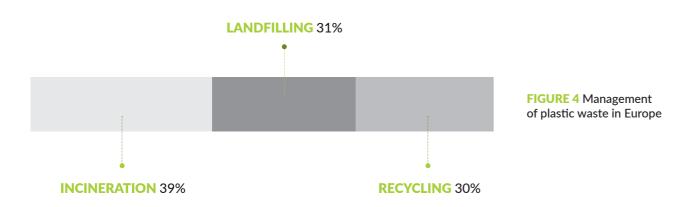
FIGURE 3 Sources of plastic waste in Europe.



With regards to the management of plastic waste at an EU level, as represented in **Figure 4**, only **30% of plastic waste generated is currently being recycled**, while the rest ends up at landfills (31%) or is incinerated (39%). This indicates that a significant quantity of plastics leave the product life-cycle after only a short use.

The rates of **reuse** and **recycling** of **plastic** waste are still very low in the EU when compared to the reuse and recycling rates for paper, glass or metal waste.

The values in **Figure 4** only represent the fraction of plastic waste, which enters waste management facilities. However, **large amounts of waste end up in the marine environment,** which leads to both a negative environmental impact and economic damage, particularly for countries whose economy is based on either or both the tourism and fishing sectors, as is the case for Malta. According to the EU Plastics Strategy, it is estimated that **every year between 150,000 and 500,000 tonnes of plastic waste arrive to the oceans and seas** from the EU.



# 3.1.2 LITTERED SINGLE-USE PLASTICS IN EUROPE

Following the publication of European Strategy for Plastics, the European Commission published an **Impact Assessment** on the use of single-use plastic products. For the purposes of the assessment, counts of items found along **276 beaches in 17 Member States** were carried out. Results have shown that plastics represents about **84% of marine litter** on European beaches, as shown in **Figure 5**.

The nature of the non-plastic fraction is inert or biodegradable (such as construction material, paper or wood), which has a lower impact on the environment. It was also determined that **half of the identifiable plastic pieces were single-use plastics**; 86% of the latter consisting of just 10 products, as shown in **Figure 6**.

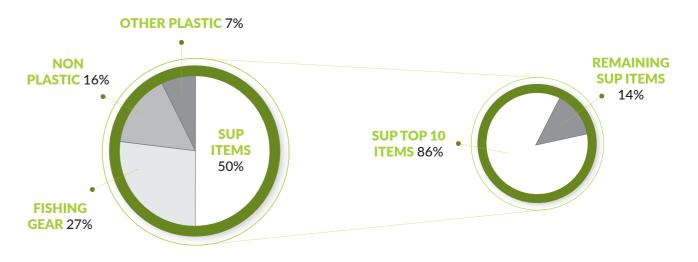


FIGURE 5 Marine litter items found on European beaches

**Figure 6** below shows the share of the **top 10 single-use plastic products** identified in the Impact Assessment. It is to be highlighted that, although some regional variation was observed, the top ten items-by-count found on European beaches changed very little even if these percentages vary.



food containers - 2%

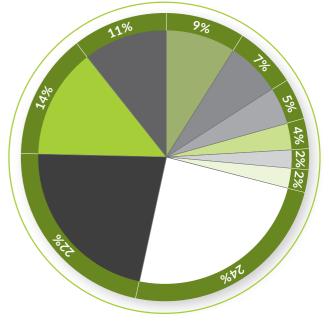


FIGURE 6 Top 10 SUP item on European beaches

# / Single-use plastic products strategy for Malta

# 3.2 NATIONAL SITUATIONAL ANALYSIS

### 3.2.1 PLASTIC WASTE IN MALTA

At a national level, Malta has similar problems pertaining to plastic waste as the rest of Europe. In Malta, plastic waste generation is increasing whereas recycling rates have remained quite stable. Recently, a number of initiatives have been launched to tackle the plastic waste problem (Section 3.2.3).

**Table 2 and Figure 7** below, provide the amount in tonnes of plastic waste generated per year in Malta. **Generation of plastic waste has been steadily increasing throughout the years.** The

values provided include plastic waste generated from the following waste fractions:

- fraction of plastic waste collected from the kerbside collection;
- fraction of plastic waste in mixed municipal waste: and
- Plastic waste from other sources (separately collected plastic waste) e.g. bring in sites, Civic Amenity sites, plastics from Construction and Demolition waste, industry and other sources.

	2011	2012	2013	2014	2015	2016
	tonnes					
Plastic waste generated	24,305	24,026	24,260	25,456	26,686	31,061

TABLE 2 Plastic waste generated in Malta (2011-2016). Source: Environment and Resources Authority, 2018

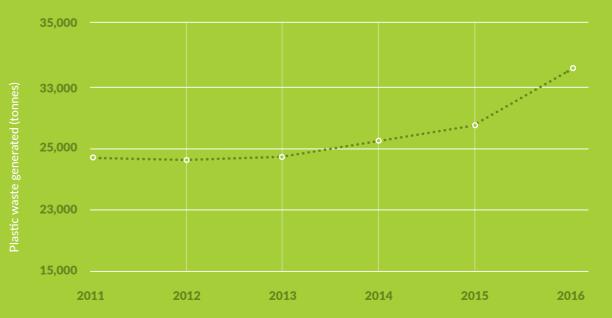


FIGURE 7 Increase of generation of plastic waste in Malta (2011-2016)

The quantity of plastic waste generated per capita in Malta has increased from 58.2 kg in 2011, up to 67.5 kg² (**Figure 8**). While the quantity of plastic

packaging waste generated per capita resulting from municipal sources increased from 55.2 kg up to 58.3 kg (**Figure 9**).

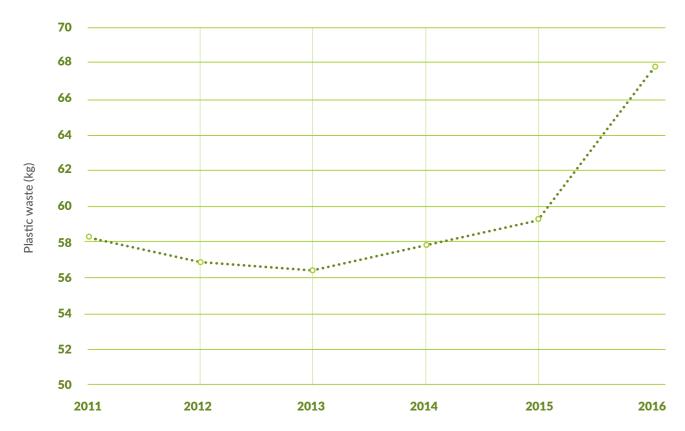


FIGURE 8 Plastic Waste generated per capita

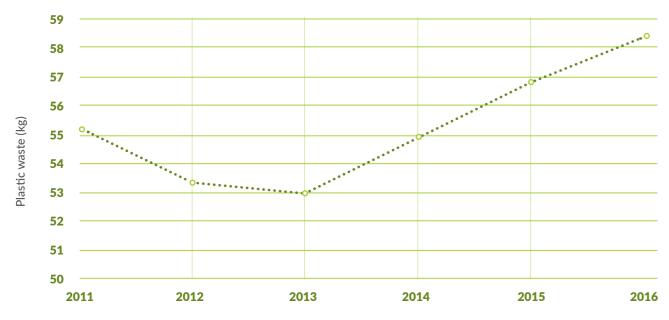


FIGURE 9 Municipal plastic packaging waste generated per capita

**Figure 10** shows the different **routes to collect plastic waste** in Malta. The collection system mainly varies depending on the generator (i.e. commercial and industry sectors or households).

**Figure 11** shows the amount of plastic waste, from 2011 to 2016, which has been treated by Malta out

of the share of plastic waste generated: , including plastic waste that has been recycled abroad or locally, as well as plastic waste collected from difference sources, including the mixed municipal waste that has been landfilled.

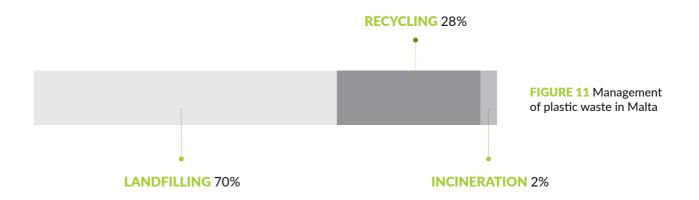


Malta is highly **dependent on export of plastic waste**, exporting for recycling and incineration, around 30% annually of the plastic waste treated (**Figure 11**), implying an additional cost to the treatment process.

Since 2016, a number of local companies, have started to reach the **end-of-waste status** for plastic waste generated, a process through

which the plastic material ceases to be waste following specific criteria set at a national level and becomes a secondary raw material for it to be used again as a product. (*Definition on end-of waste status in page 20*).

This Strategy will aim to promote and facilitate this process for specific SUP items with the objective of promoting the Circular Economy.



<sup>&</sup>lt;sup>2</sup> Plastic waste generated in kilograms, Source: ERA Population Statistics, Source: NSO

# 3.2.2 LITTERED SINGLE-USE PLASTICS IN MALTA

There are only a few studies which identify the commonly found single-use plastic items in the Maltese marine environment. However, these studies tend to indicate that the items in the Maltese waters and coasts are similar to the products identified by other surveys carried out at a regional and national level.

Local data on marine litter collected between 2017 and 2018 through EMFF 8.3.1, from beaches and coastline indicate that:

- cigarette butts, plastic bags, beverage plastic bottles, fishing floats and foam items are the most common items;
- 2. there is a clear **predominance of plastic items** in comparison to wood, metal, glass paper, cloth and others;
- the main origin of the items is from visitors to the beaches.

Remote beaches present less litter items than recreational beaches, mostly originating from **fishing and shipping activities**.

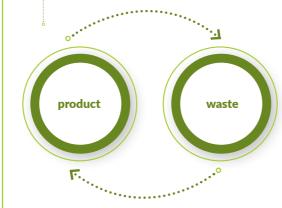
Curmi and Axiak (2017)<sup>3</sup> identify plastic litter as the main component of floating plastic marine litter in offshore coastal waters of Malta and that it constitutes **86% of all items** found. Another interesting key issue highlighted in the said study is the fact that the number of items recorded during the winter season is higher than during summer.

This might indicate that besides coastal-economic activities such as tourism, there are other sources, which are affecting the quality of our waters in terms of plastic litter. In this context, land-based and marine-based possible sources of plastic litter could be:

- Coastal-economic activities;
- Watercourses (mainly illegal dumping and littering in valleys);
- Litter originating from third countries; and/or
- Other economic activities apart from tourism, like fishing or ports.

<sup>3</sup> Curmi, M., & Axiak, V. (2017). Levels of Floating Litter in Maltese Coastal Waters. MEDCOAST

# What is the end-of-waste status?



It is a process through which a material ceases to be waste to become a secondary raw material, and therefore, ready to be used again as a product. This process implies that such waste complies with relevant criteria established

Source: WFD

# 3.2.3 INITIATIVES AT A NATIONAL LEVEL

There are a number of **local initiatives** whose aim is to tackle the generation of plastic waste. The "**Don't Waste Waste**" campaign launched in April 2016, was an initiative by the Ministry for the Environment, Sustainable Development and Climate Change (MESDC), in collaboration with Wasteserv Malta Ltd and supported by the Environment and Resources Authority (ERA). The aim of this campaign was to **raise awareness** on the importance of waste management in line with the waste hierarchy. It had also focused on single-use plastic items, mainly to reduce the use of disposable cutlery, plates, cups etc. as well as encouraging the public to collect three pieces of litter when at the beach.



The Ministry for the Environment, Sustainable Development and Climate Change is also currently finalising work to introduce by 2020 a national **Beverage Container Refund Scheme.** The scheme will aim to:

- Make both producers and consumers responsible for their packaging waste;
- Create a privately-funded infrastructure for the collection of empty beverage containers:
- Increase collection rates and enhance national efforts in reaching recycling targets; and
- Reduce littering.

The two authorised packaging waste recovery schemes, apart from providing **extended producer responsibility services, both carry out awareness-raising campaigns** on various waste streams. Such campaigns, by the two schemes, include targeted collection of plastic beverage bottles' caps and collection of Tetrapak packaging.

Environmental Non-governmental Organisations (eNGOs) in collaboration with the Cleansing Services Directorate and the Environment and Resources Authority, carry out an extensive number of awareness-raising campaigns, clean-ups in various public areas (including underwater rubbish through diving), and by providing separate collection at feasts and public events for plastic beverage bottles and their caps. Some of the NGOs are

also investing, with the help of sponsors, in providing discounts on **alternative products** which are not plastic, and in innovative and modern technologies to help tackle and reduce marine litter.

In addition, a number of **businesses** and private entities have introduced initiatives which aim to reduce the amount of plastic waste generated. A number of local **supermarkets** provide the option for customers to use their own reusable **containers** when buying certain foodstuffs. A similar initiative being carried out is the refilling of used detergent containers at a reduced price. Some catering establishments and hotels have already started to **ban the** use of plastic straws, and only provide an alternative upon request. Certain restaurants have eliminated the use of plastic beverage **bottles** and only supply beverages in glass installed interactive bins for the disposal of cigarette butts.

Such local initiatives all help in creating the necessary **cultural shift**, to reduce the generation of plastic waste and to manage adequately such waste stream. This strategy aims to provide an overarching framework, which will strengthen the initiatives already in place and provide further measures to tackle effectively plastic waste arising from single-use plastic products and fishing gear with the aim to protect the environment and human health.



# **POLICY MEASURES**

As discussed in **Section 3.1.2** the European Commission identified the Top 10 Single-Use Plastic items found in marine litter (**Table 3**) and published a proposal for a Directive on the reduction of the impact of certain plastic products on the environment. This Directive will be shortly adopted.

In addition, the European Commission also identified a number of **measures**, which can be implemented to bring about a reduction of the negative impact of the top 10 Single-Use Plastic items. The preferred measures are the following:

- Consumption reduction targets:
- Restrictions on placing on the market;

- Product design requirements;
- Marking requirements
- Extended Producer Responsibility
- Separate collection targets; and
- Awareness-raising measures.

The Directive outlines which of the selected measures are to be applied to each of the top 10 single-use plastic items and fishing gear for an effective reduction of their impact on the environment.

This Strategy duly acknowledges these measures and has taken into consideration the results of the EU Impact Assessment on reducing the impact of single-use plastic products

	Beverage containers and bottles, their caps & lids
	Tobacco product filters
	Cotton buds sticks
EU	Packets & wrappers
EU Top 10	Sanitary items
SUP	Plastic bags
items &	Cutlery, plates, straws and stirrers
fish gear	Cups for beverages and cup lids
	Balloons and sticks for balloons
	Food containers
	Fishing gear

**TABLE 3** EU Top 10 Single-use plastic items and fishing gear

### **4.1 POLICY CONTEXT**

At a European level, the Directive on the reduction of impact of certain plastic products on the environment, and other related policies are mainly targeting marine litter and its sources. This strategy aims to **tackle the prevention of plastic waste generation** by addressing the use of a number of single-use plastic items. This wider perspective will enable tackling all the sources of such waste including the coastal and marine environment and land environment. When considering Malta's geographical position and size, and its population density, such a wider context would assist in achieving better results.

# 4.2 TARGETED SINGLE-USE PLASTIC PRODUCTS

Statistical data as to the main single-use plastic products found in the environment is rather limited. Consultations were carried out to establish a basic idea of the most commonly found littered single-use plastic items.

In addition to this, the previously mentioned top 10 single-use plastic products identified in the European Commission Impact Assessment were also taken into consideration. The proposed measures will focus on fishing gear and the following single-use plastic items.

# What is oxo-degradable plastic?

Plastic materials that includes additives, which through oxidation lead to the fragmentation of the plastic material into micro-fragments or to chemical decomposition.

Source: European Plastics Strategy

# Table 4 Targeted products by the strategy

Plastic carrier bags

Beverage bottles

Beverage containers

Disposable cutlery and plates

Containers for toiletries

Straws

Beverage cups and stirrers

Pizza lid support

Tobacco product filters

Food containers

Packets and wrappers

Lollipop sticks (sold separately)

Plastic Kebab Sticks

Plastic Toothpicks

Cotton bud sticks

Balloons and sticks to support them

Plastic confetti

Plastic wristbands

Detergent containers

Sanitary items, including sanitary towels, wet wipes etc.

Fishing gear



### **4.3 POLICY OPTIONS**

Various policy options were considered to target the abovementioned single-use plastic items.

Effective measures considered to reduce the consumption of single-use plastic products the generation of plastic waste and to improve the waste management of plastics include, amongst others:

- Consumption reduction measures:
  - Packaging-free areas;

- Economic Instruments:
- Price differentiation;
- Fiscal (dis)incentives.
- Market restrictions:
  - Restricted in certain areas:
  - Restrict placement on the market;
  - Restrict distribution:
- Separate collection measures:
  - Deposit-refund schemes
- Waste management measures:
  - Improved collection system;
  - Improved collection frequency;
  - Awareness-raising campaigns

The implementation of the below proposed measures will require a number of changes to the current regulatory regime, including the amendment of current legislation, the possibility of publishing new regulations, changes in various permitting or licensing regimes and an increase in

enforcement procedures. **Key measures taken at a national level**, and which have not been adopted at an EU-level, are to be complemented by an impact assessment prior to their introduction and implementation, thus ensuring their feasibility and effectiveness.

# **SELECTED MEASURES**

This section lists the measures that have been selected for the targeted items listed in **Section 4.2** 

	Stage	Targeted product(s)	Measure proposed	Enabler(s)	Objective(s)	Alternative (if applicable)
1	С	Plastic carrier bags	By 2022 Plastic carrier bags cannot be distributed for free at the point of sale  Increase the excise duty on plastic carrier bags	<ul><li>Supermarkets</li><li>Retailers</li><li>Consumers</li><li>Importers</li><li>Manufacturers</li></ul>	<ul> <li>To incentivise consumers to take their own shopping bags</li> <li>To reduce the generation of plastic waste</li> <li>To incentivise retailers and supermarkets to distribute sustainable alternatives</li> </ul>	<ul> <li>Paper carrier bags;</li> <li>Textile carrier bags;</li> <li>Reusable shopping bags, example: jute and/or cane bags,</li> <li>Compostable or cellulose carrier bags</li> </ul>
2	D C	Products made from oxo- degradable plastic	By 2021 To prohibit their placing on the market	<ul><li>Importers</li><li>Manufacturers</li></ul>	<ul> <li>To reduce the generation of plastic waste</li> <li>To reduce the marine litter</li> </ul>	<ul> <li>Use products made of alternative materials:</li> <li>Cardboard/ paper;</li> <li>Stainless steel;</li> <li>Wood</li> </ul>
3	С	Plastic Packaging	By 2022 A voluntary scheme promoting areas within supermarkets where bulk food (e.g. olives, legumes, etc.) can be bought without plastic packaging.	<ul><li>Supermarkets</li><li>Retailers</li><li>Street Markets</li></ul>	<ul> <li>To promote responsible consumer behaviour</li> <li>To reduce the generation of plastic waste</li> <li>To inform consumers on the availability of reusable alternatives</li> </ul>	Customers can bring their own reusable and refillable containers
4	D	Beverage bottles	From 2025 - PET beverage bottles placed on the market are to contain at least 25% of recycled plastic  From 2030 - Beverage bottles placed on the market are to contain at least 30% of recycled plastic	<ul><li>Manufacturers</li><li>Importers</li></ul>	<ul> <li>To encourage manufacturing of products containing recycled plastic</li> <li>To promote the development of secondary markets for end of life resources</li> <li>To promote circular economy</li> <li>To increase plastic recycling</li> </ul>	N/A
5	D	Beverage containers	By 2024 - Ensure that only beverage containers that have caps and lids made of plastic attached to container are placed on the market	<ul><li>Importers</li><li>Manufacturers</li><li>RRRA</li></ul>	<ul> <li>To reduce the generation of plastic waste</li> <li>To reduce marine litter</li> </ul>	N/A
6	D C W	Beverage bottles	By 2020 - Deposit refund schemes to collect separately beverage bottles	<ul><li>Government</li><li>Retailers</li><li>Beverage bottlers</li><li>Beverage importers</li><li>RRRA</li></ul>	<ul> <li>To facilitate the separation of waste streams at source</li> <li>To improve the recycling process</li> <li>To promote circular economy</li> </ul>	N/A
7	D W	Plastic beverage bottles Detergent containers Containers for toiletries	By 2022 - Facilitate End of Waste Status (EoW)	Competent Authorities	<ul> <li>To promote circular economy</li> <li>To promote the development of secondary markets for end of life resources</li> </ul>	N/A

	Stage	Targeted product(s)	Measure proposed	Enabler(s)	Objective(s)	Alternative (if applicable)
8	D C W	Detergent containers Containers for toiletries	By 2022 - To introduce a return or refillable system  Consumers to benefit from a reward scheme	<ul><li>Retailers</li><li>Consumers</li></ul>	<ul> <li>To facilitate the separation of waste streams at source</li> <li>To improve the recycling process</li> <li>To promote circular economy</li> </ul>	N/A
9	D C W	Disposable toiletries Beverage bottles Beverage cups	By 2022 - Voluntary scheme to promote the use of sustainable alternatives, reusable and refillable containers in hotels, hostels, guesthouses and holiday premises	<ul> <li>Chamber of Commerce, Enterprise and Industry</li> <li>MHRA</li> <li>Hotels, hostels, guesthouses, holiday premises</li> <li>MTA</li> </ul>	<ul> <li>To reduce the consumption of SUP packaging</li> <li>To reduce the generation of plastic waste</li> </ul>	N/A
10	С	Food containers Cups for beverages	By 2022 - Benefits for students who take reusable and refillable containers when buying from shops on campus. Such benefits should be clearly advertised to create awareness	Educational Institutions	<ul> <li>To reduce the consumption of SUP packaging</li> <li>To reduce the generation of plastic waste</li> <li>To make the students aware of the negative impact of littering and on the availability of reusable alternatives to SUP</li> </ul>	<ul> <li>Reusable containers;</li> <li>Personal refillable cups;</li> <li>Glass cups;</li> <li>Other reusable containers</li> </ul>
11	С	Cups for beverages	By 2022 - Benefits for customers who take refillable cups with them. Such benefits should be clearly advertised to create awareness  By 2025 - Restrict the free distribution	<ul><li>Coffee shops</li><li>Cafeteria's</li><li>Kiosks</li><li>Bars</li><li>Take-out shops</li></ul>	<ul> <li>To reduce the consumption of single-use plastic cups</li> <li>To create a cultural shift and make the customers aware of the negative impact of the plastic products.</li> </ul>	<ul><li>Personal refillable cups;</li><li>Glass cups;</li><li>Other reusable cups</li></ul>
12	С	Pizza lid support	Restrict use by 2020	Catering establishments	To reduce the consumption of single-use plastics	Edible support: a dough ball baked in the middle of the pizza to hold the lid up
13	c W	Balloons and plastic confetti	The use and release of these items shall be prohibited in public events by 2020	<ul><li>Local Councils</li><li>Event organisers</li></ul>	To reduce the marine litter	N/A
14	c w	Plastic Wristbands	By 2020 to restrict the use of plastic wristbands at public events as well as at beach resorts	<ul><li>Event organisers</li><li>Beach resorts</li></ul>	To reduce littering	<ul><li>Paper waterproof wristbands</li><li>Textile wristbands</li></ul>
15	W	Tobacco product filters	By 2022 - Producers of tobacco to finance the provision of ashtrays at all beaches including beach resorts for the resort's guests  By 2023 - EPR schemes to be established for tobacco products with filters and filters marketed for use in combination with tobacco products	<ul> <li>Tobacco manufacturers</li> <li>Tobacco product importers</li> <li>Retailers</li> </ul>	<ul> <li>To reduce the littering of cigarette butts</li> <li>To avoid such cigarette butts ending up in the marine environment</li> </ul>	N/A
16	W	Sanitary items Wet wipes Tobacco products Cups for beverages	By 2021 - Ensure that the targeted products placed on the market bear a legible marking on their packaging or the product itself to inform consumers on waste management options and the presence of plastics	<ul><li>Importers</li><li>Manufacturers</li><li>Retailers</li><li>MCCAA</li></ul>	<ul> <li>To improve the management of plastic waste</li> <li>To reduce marine litter</li> </ul>	N/A

	Stage	Targeted product(s)	Measure proposed	Enabler(s)	Objective(s)	Alternative (if applicable)
17	C W	Food containers Packets and wrappers Beverage containers Cups for beverages (including covers and lids) Lightweight plastic carrier bags Wet wipes Balloons	From 2023 - Producers of these targeted products shall cover, amongst others, the cost of:  - the collection of such waste products from public collection systems;  - to clean-up litter;  - of awareness raising measures	<ul><li>Importers</li><li>Manufacturers</li></ul>	<ul> <li>To improve the management of plastic waste</li> <li>To reduce marine litter</li> <li>To create awareness on the negative impacts of plastic products</li> </ul>	N/A
18	D C W	Food containers Beverage containers Packets & wrappers Cups for beverages Tobacco product filters Wet wipes Balloons Lightweight plastic carrier bags Sanitary items	By 2021 - Awareness campaigns to inform consumers of the impact of littering SUP products and about the available waste management options and sustainable alternatives for them.	<ul> <li>Government</li> <li>Manufacturers</li> <li>Importers</li> <li>MIA</li> <li>Hotels, hostels, guesthouses and other holidays premises</li> <li>MTA</li> <li>MHRA</li> <li>Public Cleansing and Maintenance Directorate</li> <li>Marinas and ports</li> <li>Schools</li> </ul>	<ul> <li>To reduce marine litter</li> <li>To reduce the consumption of SUP products</li> <li>To create awareness on the negative impacts of plastic products</li> </ul>	N/A
19	C W	All single-use plastic products	Bins for separate collection of plastic waste in hotels, hostels, guesthouses, holiday premises and yacht marinas by 2022	<ul> <li>MHRA</li> <li>Hotels, hostels, guesthouses, holiday premises</li> <li>MTA</li> <li>Yacht marinas</li> </ul>	<ul> <li>To facilitate the separation of waste streams at source</li> <li>To improve the recycling process</li> <li>Improve waste management</li> </ul>	N/A
20	D C	Lollipops sticks (sold separately) Sticks to support balloons Cotton bud sticks Straws Cutlery Food containers made of expanded polystyrene Beverage containers made of expanded polystyrene Cups for beverages made of expanded polystyrene Kebab sticks Toothpicks Plates Beverage Stirrers	To restrict placement on the market by 2021	<ul><li>Retailers</li><li>Importers</li><li>Manufacturers</li></ul>	<ul> <li>To reduce the consumption of SUP</li> <li>To reduce the generation of plastic waste</li> <li>To reduce the marine litter</li> </ul>	<ul> <li>Use products made of alternative materials:</li> <li>Cardboard/ paper;</li> <li>Stainless steel;</li> <li>Wood</li> </ul>

	Stage	Targeted product(s)	Measure proposed	Enabler(s)	Objective(s)	Alternative (if applicable)
21	w	All single-use plastic products	By 2020 - Ensure that coastal areas, camping sites, picnic areas and touristic areas are equipped with bins for the separate collection of plastic	Government	<ul> <li>To reduce the marine litter</li> <li>Improve separate waste collection and management</li> </ul>	N/A
22	D W	Fishing Gear	To progressively reduce the use of plastics and nylon and substitute with a more sustainable materials.  By 2022 - The use of polystyrene should be restricted and substituted by re-usable plastic floats or any other sustainable material.  By 2024 - Extended Producer Responsibility Scheme is to be established for fishing gear containing plastic placed on the market	<ul> <li>Manufacturers</li> <li>Importers</li> <li>General Retailers and Traders Union (GRTU)</li> </ul>	To reduce the marine litter	Fishing gear made from alternative material
23	D	Fund/scheme for innovation	By 2025 - To create a national fund and/ or scheme which encourages enterprises or institutions to carry out research or to invest in innovative technology that can help to attain the aim of this strategy – reduction of the negative impacts of plastics on the environment and human health.	<ul><li>Business community</li><li>RRRA</li><li>UOM</li><li>MCAST</li><li>MCST</li></ul>	<ul> <li>To promote investment in innovative technology</li> <li>To promote R&amp;D</li> </ul>	<ul> <li>Seabins</li> <li>Intelligent bins</li> <li>Other alternatives to be considered</li> </ul>

- **1.** Encourage the **reduction of plastic carrier bags use**, and increase use of reusable bags.
  - By 2022, plastic carrier bags shall not be distributed for free at the point of sale. If consumers require a bag, it would need to be bought. This will incentivise consumers to always take a reusable shopping bag.
  - The excise duty imposed on such plastic carrier bags shall also be increased.

### 2. Prohibit Oxo-degradable Plastic

 By 2021, the placing on the market of oxo-degradable plastic products will be prohibited, as this type of plastic does not properly biodegrade and thus contributes to micro-plastic pollution in the environment, is not compostable, negatively affects the recycling of conventional plastic and fails to deliver a proven environmental benefit.

- **3.** Ensure **Packaging-free areas** in supermarkets.
  - By 2022, a voluntary scheme should be set up to incentivise supermarkets to provide packaging-free areas where customers can only buy the selected food products without plastic packaging. This will both encourage consumers to move towards reusable containers as well as in itself reducing the generation of plastic waste.
- **4. WIN|WIN** Better incentives when using better products.
  - By 2025, all PET beverage bottles placed on the market are to contain at least 25% of recycled plastic.
  - By 2030, beverage bottles placed on the market are to contain at least 30% of recycled plastic.

- **5.** Reducing the amount of **small plastic items littered** and lost in the environment, especially in **marine areas**.
  - By 2024, only beverage containers with plastic caps and lids attached to the container are to be placed on the market
- **6.** Increase separate collection & recycling rates of single-use plastic beverage bottles.
  - In 2020, the setting-up of the Beverage Container Refund Scheme will increase the separate collection of beverage bottles through the use of reverse vending machines, where consumers can easily redeem the deposit paid when purchasing a bottle. Such separate collection will inevitably result in better source separation and hence better quality o waste for recycling.

- 7. Promoting Circular Economy through End-of-Waste.
  - By 2022, the process through which waste arising from plastic beverage bottles and containers from toiletries and washing preparations can reach the End-of-Waste status, will be made easier through the issuance of clear criteria and guidance.
- **8. Separate collection** for valuable waste streams.
  - By 2022, a return or refillable system shall be introduced, where consumers who return or refill containers used for washing preparations, and other personal care products, may be able to benefit from a reward scheme.

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# Increase sustainable alternatives; Decrease unnecessary plastic packaging

 By 2022, a voluntary scheme should be set up to incentivise the use of sustainable alternatives, reusable and refillable containers; in hotels, hostels, guesthouses and holiday premises. This will help in reducing the generation of plastic waste.

# **10.** Create a **cultural shift** within youths and students.

By 2022, students who do not make use
 of the disposable plates, food containers
 and beverage cups provided at educational
 institutions would be rewarded through a
 number of benefits. Such benefits should be
 clearly indicated and advertised, to create
 environmental awareness on the negative
 impacts of single-use plastic items.

# **11. Reduce plastic waste** generation through **reduced consumption**.

- By 2022, customers should benefit when using refillable beverage cups. Such benefits should be clearly indicated, and advertised, to create awareness on the negative impacts of single-use plastic items.
- By 2025, restrict the free distribution of single-use plastic beverage cups.

# **12. Eliminate** any extra **single-use plastic** packaging.

 By 2020, the use of the plastic pizza lid support shall not be allowed, at all catering establishments.

# Which events are public events?

- Village feasts;
- Inaugurations:
- Political party rallies;
- Local Festivals;
- Other multitudinous events.

### 13. No harmful entertainment.

 By 2020, the release of balloons and plastic confetti shall not be allowed during any public events to avoid having these items ending up in the marine environment.

# **14. Reduce** the possibility of **litter**.

 By 2020, the use of plastic wristbands, used at public events as well as at beach resorts, shall be restricted. Such item is usually littered and more sustainable alternatives are available on the market.

### 15. Ensure a cleaner environment.

- By 2022, producers of tobacco and tobacco products are to finance the provision of ashtrays at all beaches including at beach resorts for the resort's guests.
- From 2023, producers of tobacco products with filters and filters marketed for use in combination with tobacco products shall cover at least the cost of:
  - Awareness raising measures;
  - Cleaning-up of litter; and
  - The collection of such waste discarded in the public collection system. This may include the installation of bins for cigarette filters in common litter hotspots.

### 16. Clear marking for better awareness.

 By 2021, sanitary products, wet wipes, tobacco products and beverage cups made of plastic, and placed on the market should all bear a legible marking on their packaging, or on the product itself, which informs consumers on the waste management options available and the presence of plastic within the product.

# **17. Extended Producer Responsibility** for highly littered items

- From 2023, producers of:
  - Food containers;
  - Packets and wrappers;
  - Beverage containers;
  - Beverage cups including their covers and lids:
  - Lightweight plastic carrier bags;
  - Wet wipes; and
  - Balloons

Shall cover, amongst others, the costs necessary for:

- Awareness raising measures;
- Cleaning-up of litter; and
- The collection of such waste discarded in the public collection system. This may include the installation of bins for cigarette filters in common litter hotspots.

# What is an EPR Scheme?

It is a set of national measures to ensure that producers of products bear financial responsibility or financial and organisational responsibility for the management of the waste stage of a product's life cycle.

Source: Directive 2008/98/EC on waste

# 18. Encourage the increase of public knowledge.

 By 2021, Awareness campaigns shall be carried out, by all enablers, to inform consumers that littering of the single-use plastic products which they are purchasing, will have a negative impact both on the environment and human health, as well as highlighting the correct and available waste management options. Such campaigns should also inform the public on the sustainable alternatives available to use instead of the single-use plastic product.

### 19. Eliminate single-use plastic products.

- By 2021, a number of highly littered singleuse plastic items shall not be allowed to be placed on the local market and their distribution will be restricted, in view of the readily available and economically feasible alternatives available on the market.
- This will ensure the protection of the environment, especially through the reductions of some of the main sources of marine litter.

### **20.** Encourage waste separation at source.

 By 2022, all tourist accommodations including hotels, hostels, guesthouses as well as holiday premises and yacht marinas should provide to their guests, bins for the separate collection of plastic waste. Such a measure ensures that tourists are informed on the negative impacts that incorrect disposal and littering will have on the marine environment.

### 21. Making it easier not to litter.

 By 2020, the Government shall endeavour to provide bins for the separate collection of plastic waste in coastal areas, camping sites, picnic areas and touristic zones.

### 22. Protecting our waters.

- The use of fishing gear made from plastics and nylon should be progressively substituted to gear which is made from more sustainable material.
- By 2022, the use of polystyrene in fishing activities should be restricted and substituted by re-usable plastic floats or any other sustainable material.
- By 2024, an Extended producer responsibility scheme is to be established for fishing gear containing plastic which are placed on the market.

### 23. Supporting Research and Innovation.

 By 2025, a national fund and/or scheme to encourage enterprises to invest in innovative technology, which can help to attain the aim of this strategy, and reduce the negative impacts of single-use plastics on the environment and human health, should be created. Such a fund can also cover investment in more sustainable alternatives, which currently do not occupy a large proportion of the European market and are not as well-established.

**CONCLUSION** 

This Strategy proposes concrete measures in the short and mid-term designed to make the change to a more circular economy, a reality. The success of this Strategy relies on proper implementation of these measures and on the effective cooperation of all relevant stakeholders

Whilst understanding that these measures may instil socio-economic effects, several aspects outlined in the Strategy would need to be taken into consideration for its successful implementation. The Government is calling on competent authorities, and enablers within the plastic and plastic waste industry, and all relevant stakeholders, to commit to the implementation of such measures. Without the participation of all enablers, this exercise will prove unsuccessful. Nonetheless, the Government shall commit itself to embark on monitoring the implementation of this Strategy and exploring new routes through continuous research and innovation, with the aim to promote the use of sustainable alternatives and move towards a plastic-free environment.

