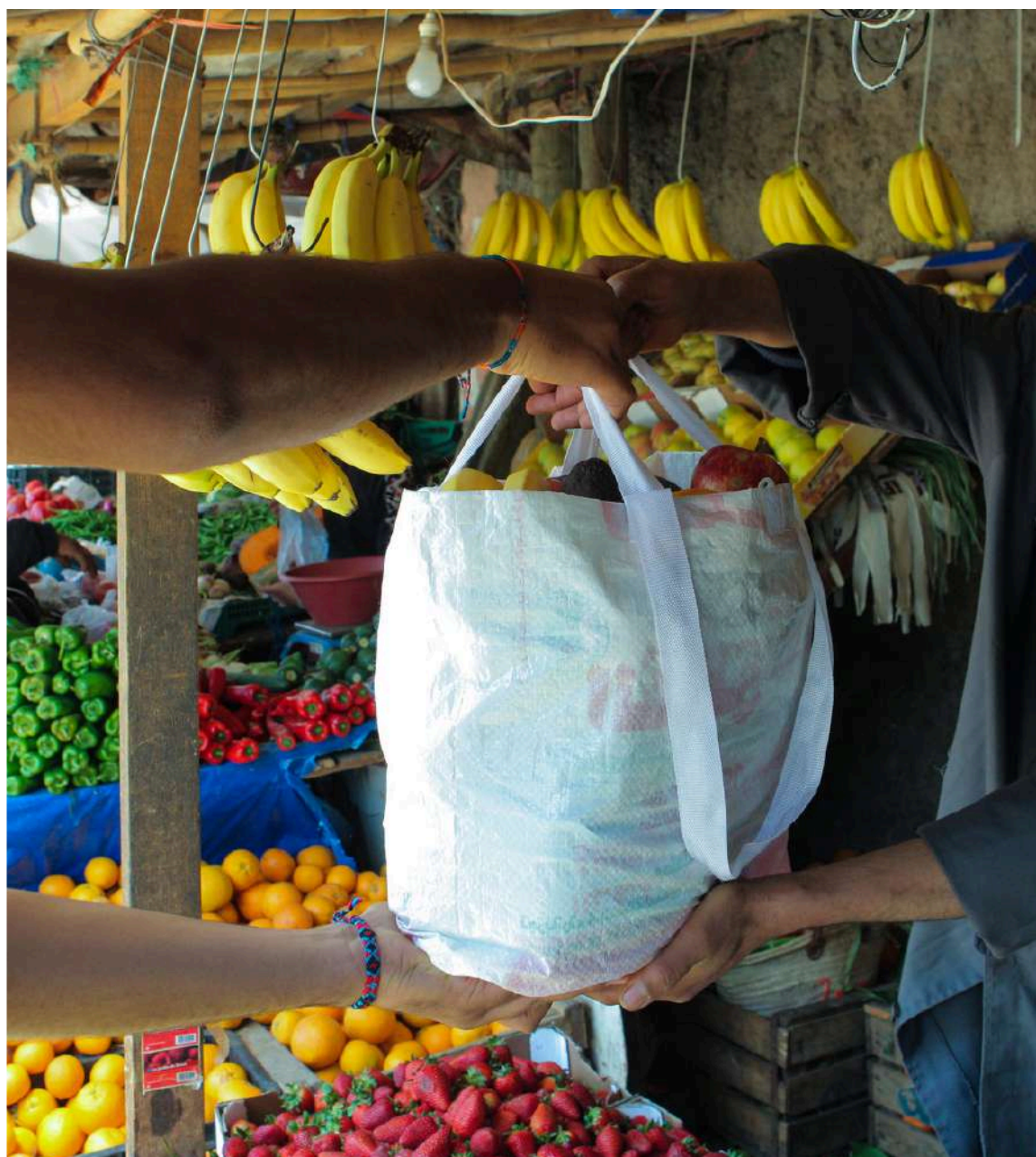


# GUIDELINES TO PHASE OUT SINGLE-USE PLASTIC BAGS IN THE MEDITERRANEAN



## Note

SCP/RAC centre changed its name in May 2022 and officially became: *MedWaves, the UNEP/MAP Regional Activity Center for SCP*. The logos on the cover and last page have been updated but the change was not reflected in the text, published before the official change.

## About

This publication was developed by the Regional Activity Centre for Sustainable Development and Production (SCP/RAC) within the EU-funded project Marine Litter Med. SCP/RAC has an official mandate from the Contracting Parties to the Barcelona Convention to engage in international cooperation with Mediterranean countries on the prevention of plastic pollution, including marine litter and on the development and innovation in the business sector.

Design and illustrations: Estudio Discursiva  
Pictures: MapLab, Pixabay and The Switchers  
December 2019

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# Foreword

The Eighteenth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean ("the Barcelona Convention"), held in Istanbul, Turkey, from 3 to 6 December 2013, adopted Decision IG.21/7 related to the Regional Plan on Marine Litter Management in the Mediterranean in the Framework of Article 15 of the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-based Sources and Activities (LBS Protocol) to the Barcelona Convention, hereinafter referred to as the Marine Litter Regional Plan (UNEP(DEPI)/MED IG.21/9).

Furthermore, and in accordance with Article 14 of the Marine Litter Regional Plan, the Secretariat in cooperation with relevant international and regional organisations, is mandated to prepare specific guidelines taking into account where appropriate existing guidelines, to support and facilitate the implementation of measures provided for in Articles 9 and 10 thereof, whereby, subject to availability of external funds, such guidelines shall be published in different Mediterranean region languages.

The MAP Programme of Work (PoW) 2018-2019 adopted by the Twentieth Ordinary Meeting of the Contracting Parties to the Barcelona Convention and its Protocols, held in Tirana, Albania, from 17 to 20 December 2017, contains several activities addressing marine litter including the implementation of the EU funded Marine Litter MED Project, which has specific outputs on the development of a set of technical guidelines in the framework of Article 14 of the Regional Plan.

Single-use plastic bags (SUPB) rank among the most commonly found marine litter items in the Mediterranean Sea. The Regional Plan on Marine Litter Management in the Mediterranean, adopted by all the Contracting Parties to the Barcelona Convention, urges national authorities, among others, to take action to reduce SUPB.

The present document has been developed within the EU-funded Marine Litter Med Project. The guidelines were endorsed at the COP21 of the Barcelona Convention (2-5 December 2019) as Decision IG.24/11. Prior to this, they have followed a thorough revision process including through two regional marine litter dedicated meetings and the MAP governance system meetings. Hence, the Contracting Parties are committed to make best use of these guidelines.

The guidelines intend to provide a common understanding of the set of measures that can be considered in developing the most appropriate legal and regulatory framework to introduce the non-single use of plastic bags in the signatory countries of the Barcelona Convention. While these guidelines focus on the full process of decision making, from absence of actions to reduce SUPB to a comprehensive programme to tackle them, they can also be used to complement and strengthen actions in countries where the process is ongoing. In fact, experiences show loopholes and obstacles in different countries and these guidelines intend to contribute in overcoming them. The guidelines build on the review and lessons learnt of international cases, considering the context in the Mediterranean region and specific actions supported by UN Environment/ Mediterranean Action Plan (MAP) components in some of the countries.

These guidelines introduce the subject by explaining the scope of the guidelines and why SUPB is a marine litter item of high concern. Later, the three main categories of policy measures are briefly explained and compared. Next, the document describes comprehensively an 8-steps roadmap towards phasing-out single use plastic bags. Finally, they include master templates of the legal instruments, presented in the annexes to these guidelines to facilitate the policy making process.



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## List of Abbreviations / Acronyms and definitions

Bag-use profile	Proportion of bag types used at retail venues
EPR	Extended Producer responsibility
GES	Good Ecological Status
GHG	Green-house emissions
HDPE	High-density polyethylene
LCA	Life-cycle assessment
LDPE	Low-density polyethylene
PP	Polypropylene
SCP/RAC	Regional Activity Centre for Sustainable Consumption and Production
SUPB	Single-use plastic bags: high-density polyethylene (HDPE) bags designed to be used once. This is usually determined by the width or grammage. For the purpose of this report, the focus is on those that have handles, generally used as shopping carrier bags.

# Guidelines to phase out single-use plastic bags in the mediterranean





# 1. Introduction

## 1.1. Scope

Single-use plastic bags (SUPB) rank among the most commonly found marine litter items in the Mediterranean Sea and coast<sup>1</sup>. The leakage of bags into the environment poses threats not only to biodiversity but also to society, with adverse impacts on economic development and public health. Single-use plastic bags have become an icon of plastic pollution and the fight against it; and thus around 60 countries have introduced policies to tackle them<sup>2</sup>.

The Regional Plan on Marine Litter Management in the Mediterranean<sup>3</sup>, adopted by the Contracting Parties to the Barcelona Convention in 2013, urges national authorities according to Article 9, among others, to take action to reduce SUPB through the “Establishment of voluntary agreements with retailers and supermarkets to set an objective of reduction of plastic bags consumption as well as selling dry food or cleaning products in bulk and refill special and reusable containers” and “Fiscal and economic instruments to promote the reduction of plastic bag consumption.” Action has already been taken in most of the countries of the Mediterranean (e.g. France, Spain, Italy, Greece, Croatia, Slovenia, Albania, Bosnia and Herzegovina, Morocco, Tunisia etc.), including the total ban of certain types of SUPB or certain applications of them.

With the ultimate objective of achieving the Good Ecological Status<sup>4</sup> (GES) of the Mediterranean Sea, the EU-funded Marine Litter MED Project<sup>5</sup> addresses the reduction of single-use plastic bags in Algeria, Egypt, Israel, Lebanon, Libya, Morocco and Tunisia, as one of the key common measures provided for in the Regional Plan on Marine Litter Management in the Mediterranean. Within this project, technical assistance has been provided to three countries (i.e. Tunisia, Egypt and Lebanon) to develop, where appropriate, the required legal and regulatory framework to halt marine litter from single-use plastic carrier bags by phasing

out their consumption and production. The project also provided technical assistance to Morocco and Algeria regarding the introduction of Extended Producers Responsibility in the food and beverage packaging sector. Through the bilateral cooperation agreement between UN Environment/MAP and the Italian Ministry for Environment, Land and Sea Protection (IMELS), similar support is provided to Albania, Bosnia and Herzegovina and Montenegro.

These guidelines intend to provide a common understanding of the measures that can be considered in developing the most appropriate legal and regulatory framework to reduce the production and consumption of SUPB in the signatory countries of the Barcelona Convention. Notwithstanding, it is important to acknowledge the different baseline in each of the countries. The EU Member States have already taken action driven by the Directive 2015/720 on the reduction of the consumption of lightweight plastic carrier bags. Non-EU countries such as Bosnia and Herzegovina, Israel, Morocco, Tunisia and Turkey have enacted important regulatory, fiscal or voluntary measures, or are in the process of drafting. Other countries have not started the process yet but have expressed their intention and commitment to do so.

The guidelines target policy-makers and provide them with a step-by-step approach for developing the most appropriate legal/policy/regulatory framework to halt marine litter from single-use plastic carrier bags by phasing out their consumption and production. They build and focus on three broad categories of policies that have been already put in place in different parts of the world<sup>6</sup>, including:

- **Voluntary agreements;**
- **Regulatory economic instruments; and**
- **Command and control instruments: bans.**

1. UNEP/MAP (2015). Marine Litter Assessment in the Mediterranean 2015. United Nations Environment Programme / Mediterranean Action Plan. ISBN No: 978-92-807-3564-2

2. UN Environment (2018). The state of plastics. World Environment Day Outlook 2018. [http://wedocs.unep.org/bitstream/handle/20.500.11822/25513/state\\_plastics\\_WED.pdf](http://wedocs.unep.org/bitstream/handle/20.500.11822/25513/state_plastics_WED.pdf)

3. UNEP/MAP (2013). Regional Plan for the Marine Litter Management in the Mediterranean <https://wedocs.unep.org/rest/bitstreams/8222/retrieve>

4. UN Environment/ Mediterranean Action Plan (2018). Ecosystem Approach. <http://web.unep.org/unepmap/who-we-are/ecosystem-approach>

5. <http://web.unep.org/unepmap/what-we-do/projects>

While these guidelines focus on the full process of decision making, from absence of actions to reduce SUPB to a comprehensive programme to tackle them, they can also be used to complement and strengthen actions in countries where the process is on-going. In fact, experiences show loopholes and obstacles in different countries, and these guidelines intend to contribute in overcoming them.

## 1.2. Issue

Plastics are one of the main materials of the modern economy due to their multiple properties, applications and low cost. Their use has been growing exponentially since the 1950s, and is expected to double in the next 20 years<sup>7</sup>.

Plastic packaging, which includes plastic carrier bags, is the plastic's largest application, representing 26% of the total volume at global level.<sup>7</sup> It is estimated that roughly 5 trillion plastic carrier bags are consumed worldwide each year. That is almost 10 million plastic carrier bags per minute<sup>8</sup>. The main issue is that 95% of worldwide plastic packaging (including plastic bags) value is lost to the economy after a short first use. This poses adverse negative effects for people and nature<sup>9</sup>. Waste disposed in landfill or incinerated involves economic costs which burden tax payers. When plastic leaks into the environment, the main problem might be regarded as its main feature: durability; the long process to mineralize involves impact not only in the environment, but also socioeconomic effects such as the loss of aesthetic values which may be linked to economic activities. When it comes to the marine environment, the process to degrade is even longer. Plastics have been reported to negatively impact between 180 and 660 species of animals, including birds, fish, turtles, and marine mammals, with a portion of these plastics presumably comprised of plastic bags<sup>9</sup>. Marine animals may confuse bags for food leading to ingestion, blocked digestive

tracts and eventual death. Plastic breaks down in smaller pieces in the oceans, down to micro- and nano-plastics. There is evidence that these particles are being consumed by marine organisms, with effects in terms of toxicology poorly known, especially with regards to impacts on human health<sup>10</sup>.

SUPBs are defined in the literature as high-density polyethylene (HDPE) bags designed to be used once. SUPBs rose to popularity for use in retail venues in the 1970s and remain the most popular grocery bag choice around the world in the absence of regulatory measures to control them<sup>11</sup>.

Their product-to-waste flow, represented in the figure below, begins with the conversion of fossil fuels (but also a very low fraction from organic sources) into polymers used to manufacture all plastic. This follows a strictly linear economic model. The window of consumer use for SUPBs averages only 20 minutes<sup>12</sup> after which it can follow several paths. Once used, plastic bags may be collected as household waste and end up in landfill or incinerator. A proportion of SUPB are indeed recycled, but this fraction is very low due to low profitability (from 1% to 5%, according to various sources.<sup>13,14</sup>). Often these bags are later reused as linen bags, and ultimately become household waste. When disposed in the environment, they can take between 400 and 1000 years to break down. Waste collection and management is particularly poorly organized in the beneficiary countries to the Marine Litter MED Project making plastic leakages even more important.

6. The main features and effectiveness of worldwide cases are discussed in detail in the document UNEP/MED WG.466 Inf.5 Background elements for the guidelines on phasing out single-use plastic bags: review of international experiences and alternative options.

7. World Economic Forum, Ellen MacArthur Foundation and McKinsey & Company (2016). The New Plastics Economy — Rethinking the future of plastics. <http://www.ellenmacarthurfoundation.org/publications>

8. UN Environment (2018). The state of plastics. World Environment Day Outlook 2018. [http://wedocs.unep.org/bitstream/handle/20.500.11822/25513/state\\_plastics\\_WED.pdf](http://wedocs.unep.org/bitstream/handle/20.500.11822/25513/state_plastics_WED.pdf)

9. UNEP (2014). Plastic Debris in the World's Oceans. [http://www.unep.org/regionalseas/marinelitter/publications/docs/plastic\\_ocean\\_report.pdf](http://www.unep.org/regionalseas/marinelitter/publications/docs/plastic_ocean_report.pdf)

10. Gallo F. et al (2018). Marine litter plastics and microplastics and their toxic chemicals components: the need for urgent preventive measures. *Environ Sci Eur.* 2018; 30(1): 13. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5918521/>

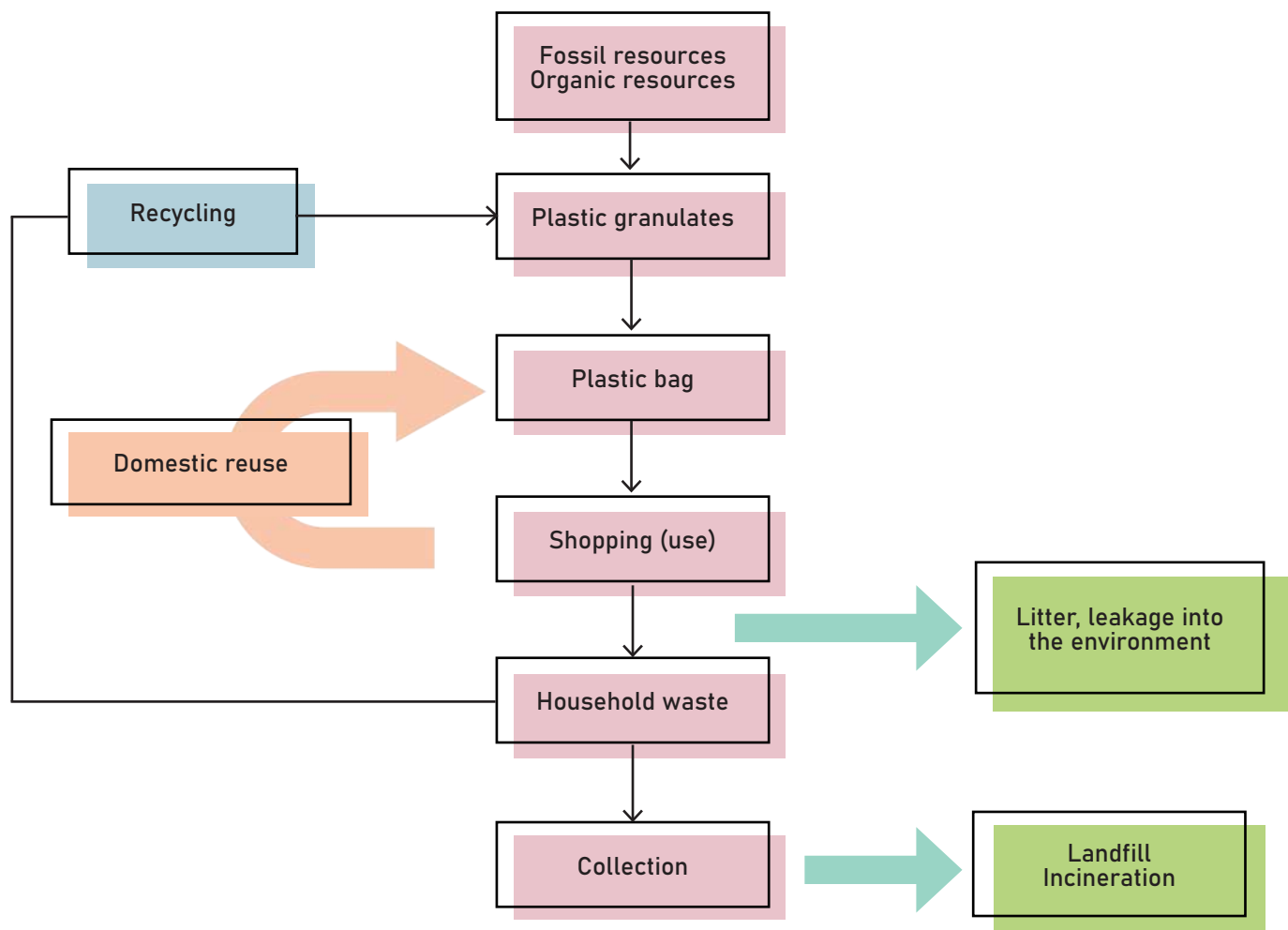
11. Green Cities California (2010). Master Environmental Assessment on Single-Use and Reusable Bags. ICF International. [https://www.smgov.net/uploadedFiles/Departments/OSE/Task\\_Force\\_on\\_the\\_Environment/TFE\\_2010/03%2015%2010\\_Attachment%205\\_MEA\\_Single%20Use%20Bags.Ex.Summary.pdf](https://www.smgov.net/uploadedFiles/Departments/OSE/Task_Force_on_the_Environment/TFE_2010/03%2015%2010_Attachment%205_MEA_Single%20Use%20Bags.Ex.Summary.pdf)

12. Equinox Center (2013). Plastic Bag Bans: Analysis of Economic and Environmental Impacts. <https://energycenter.org/sites/default/files/Plastic-Bag-Ban-Web-Version-10-22-13-CK.pdf>


13. Waste Management (n.d.). Bags by the Numbers <http://www.wmnorthwest.com/guidelines/plasticvspaper.htm>

14. USEPA (2006). Municipal solid waste in the United States: facts and figures. <http://www.epa.gov/epaoswer/non-hw/muncpl/pubs/mswchar05.pdf>

Figure 1.  
SUPB product-to-waste flow in  
MENA countries.  
Source: Own elaboration







## 2. Options for phasing out the use and production of single-use plastic bags

**This section briefly explains the main policy options to tackle SUPB, based on the review of international experience<sup>15</sup>.**

It is important to note that often policy options are implemented as a policy mix, or gradually implemented. A summary table is included at the end of this section to compare pros and cons of the different options.

### 2.1. Voluntary agreements

In some cases, retailers have the lead in such initiatives, driven by internal factors (e.g., Corporate Social Responsibility (CRS) and branding purposes) and as a response to the threat by public authorities to introduce binding, i.e. non-voluntary, regulation. However, public bodies often promote such agreements or commitments through e.g. memorandums of understanding.

There are two main types of agreements to tackle SUPB:

- Non-distribution of SUPB, and therefore other alternatives are made available (e.g. paper bags, multi-use bags), normally at a cost for the consumer.
- Paying for distribution of SUPB, often along the possibility to purchase multi-use bags.

In both cases, the voluntary agreement acts as an economic disincentive on the consumer, resulting in a decrease of SUPB consumption.

### 2.2. Regulatory economic instruments

Government can enact legal instruments to put charges on SUPB at the distribution stage. Even small

charges can have a strong signaling effect on consumers, creating incentives to switch towards other options. There are two main modalities of regulatory charges:

- Those which become revenue for the supermarket. In this case, it is often up to the retailer to decide the amount levied on SUPB.
- Those which become revenue for the public administration to reduce the negative externalities of SUPB. In this case, the charge is often called "tax" or "eco-tax". Retailers must report periodically the revenues raised and pay to the tax administration.

Another type of economic instrument that can be applied to SUPB is subsidies. In this case, the government may opt for subsidizing e.g. multi-use bags, to support phasing out SUPB.

### 2.3. Command and control instruments: bans

Command-and-control or regulatory instruments have a direct influence on the behaviour of actors by imposing rules that limit or prescribe the actions of the target group. These instruments have a legal basis. Enforcement and control is a key element in the success of the instrument. Different bans are being used to tackle SUPB, including bans on certain types, applications and conditions. The legal instrument defines the concept of SUPB, often in terms of material, width and volume, and determines the provisions under which other plastic bags can be used. In some cases, it also levies the distribution of alternatives to SUPB.

15. The main features and effectiveness of worldwide cases are discussed in detail in the document UNEP/MED WG.466 Inf.5. <https://arc.fastfold-er.net/index.php/s/QNGAvqdx68UzRuB>

## 2.4. Comparison of policy options\*

\* Based on BIO Intelligence Service (2011).<sup>16</sup>

Policy option	Pros	Cons
"Business as usual"	<ul style="list-style-type: none"> <li>• No legal or administrative changes or costs associated with revising current legislation.</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental, economic and social impacts associated with plastic carrier bag use would persist and/or worsen (e.g. accumulation of litter in the environment).</li> </ul>
Voluntary commitment of a significant share of the retail sector not to provide SUPB or for free	<ul style="list-style-type: none"> <li>• Some reduction in plastic carrier bag use at participating shops.</li> <li>• Minimal disruption for manufacturers and retailers.</li> <li>• More 'buy-in' from retailers.</li> <li>• Less administrative burden for governments as they would be less involved than for mandatory measures.</li> <li>• Progressive introduction of durable bags</li> </ul>	<ul style="list-style-type: none"> <li>• Not all shops would participate.</li> <li>• Under a voluntary agreement, it is unlikely that there would be a dedicated monitoring and enforcement body, nor sanctions to ensure participating retailers stick to the targets and commitments set out.</li> <li>• Consumers would need to pay SUPB or multi-use bags, which may result in certain opposition at early stage</li> </ul>
Economic disincentive by charging consumers for the distribution of SUPB	<ul style="list-style-type: none"> <li>• It has been proven a clear reduction in SUPB use when the charge is high enough, resulting in a behavioural change.</li> <li>• No major disruption for SUPB manufacturers</li> <li>• Public fund raising opportunity when the instrument is designed to channel the funds to public administrations (tax).</li> </ul>	<ul style="list-style-type: none"> <li>• In terms of consumer behaviour, mandatory consumer charges are a more direct lever than a voluntary agreement.</li> <li>• Consumers would need to pay SUPB or multi-use bags, which may result in certain opposition at early stage</li> <li>• When it's conceived as a tax, administrative burden on retail sector and public tax administration</li> <li>• Monitoring and enforcement required by public administration</li> </ul>
Ban on single-use plastic carrier bags	<ul style="list-style-type: none"> <li>• Provides high level of certainty in the mitigation of environmental impacts, especially litter.</li> <li>• Possible increase in revenue and jobs for some countries producers of alternative carrier bags.</li> </ul>	<ul style="list-style-type: none"> <li>• Monitoring and enforcement required by public administration</li> <li>• Loss of revenue and jobs connected with single use plastic carrier bags.</li> <li>• Loss of consumer choice.</li> <li>• Inconvenience for customers when alternatives are not sufficiently mature</li> </ul>

16. BIO Intelligence Service (2011). Assessment of impacts of options to reduce the use of single-use plastic carrier bags. Final report prepared for the European Commission – DG Environment [http://ec.europa.eu/environment/waste/packaging/pdf/report\\_options.pdf](http://ec.europa.eu/environment/waste/packaging/pdf/report_options.pdf)



### 3. Roadmap for the reduction of single-use plastic bags in the Mediterranean region: an 8 step-by-step



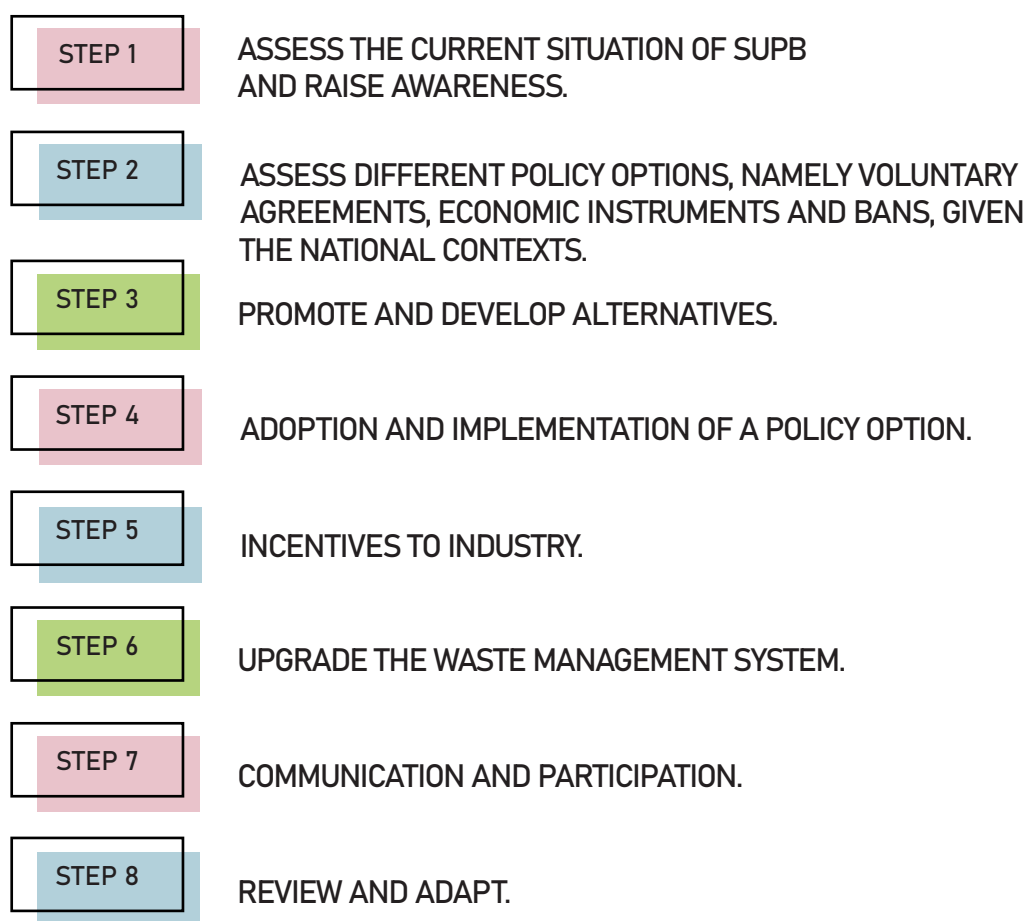
Considering experiences in the Mediterranean region and beyond, sound solutions should be designed in a long-term time frame. A progressive, step-by-step approach should be adopted in order to ensure that:

- a) Governmental mechanisms are in place to monitor the production and consumption of SUPB, in order to review and adapt if the targets are not met.
- b) Economically/environmentally/technically sound alternatives are available, and the relevant standards and norms are in place to ensure the use and production of safer alternatives.
- c) Relevant industry has time/incentives/access to technology to reconvert, without major jobs/revenues loss.
- d) Incentives for the development of new technologies are in place for green entrepreneurs and businesses willing to put new alternatives on the market.
- e) Consumers are aware of the impacts of their behaviour, and are incentivized to modify their consumption patterns.
- f) The waste management system in the countries is adapted to accompanying the phase out process. First, it is important that collection/recycling rates improve, and unsound disposal is avoided. Later, the waste management system may need to adapt to the new alternatives introduced in the market, such as compostable bags (or other disposable and compostable items).

Different policy options may attain similar drastic reductions as proven by the experience of a great number of countries analyzed before the preparation of these guidelines. It is important to note that economic impact of reducing/banning SUPB does not seem to be crucial for any of the cases reviewed. On the contrary, some of them consider this as an opportunity to develop internal economic activity.



The approach to phase out SUPB in the Mediterranean region consists of the following 8 steps listed below. Countries that already implemented measures in this regard may find complementary and supportive actions:



### 3.1. Preliminary measures (Steps 1, 2 and 3)

#### STEP 1

#### **Assess the current situation of SUPB and raise awareness:**

The starting point should be a clear view of the SUPB product-to-waste chain in the country, particularly in terms of production, imports and consumption. In the absence of national data about the production of SUPB, a survey should be conducted through the chamber of industry and commerce, the association of plastic producers, or similar. Or, plastic producers should be approached directly, in case they are not too many. This survey will allow not only knowing the number and characteristics of SUPB being produced in the country, but also related revenues and jobs. At this point, it is very important to consider that in many countries the informal economy in plastic bags production may be high and this should be addressed in terms of impact of any adopted policy option. For example, an eventual ban may drive the sector to increased informality. Regarding imported

SUPB, the customs administration should hold this data. Moreover, gaining knowledge on how plastic bags are used by the population is important, as well as their perception on the issue and the available alternatives. This type of research could be coupled with awareness raising campaigns, which are a common element for all policy options to be thoroughly and extensively applied before and after the adoption of the measure. These elements may lead to set prevention quantitative targets and provide a baseline to monitor progress.

#### STEP 2

#### **Assess different policy options, namely voluntary agreements, economic instruments and bans, given the national contexts:**

In addition to economic and environmental aspects, the assessment should pay attention to the national capacity to enforce instruments such as bans and/or levies as well as on the impact on the low-income populations. Thus, socioeconomic and policy/institutional aspects should be analysed in order to know how an eventual measure would be implemented, and potential effects it may have on

the administration, industry, retailers and population. Evidence-based studies, namely socio-economic assessments on the effect of the selected policy option in the national context, are also necessary to defeat opposition from the plastics industry. Further to the general comparison shown in section 2.4, a more accurate assessment is advised in terms of potential environmental and socioeconomic effects of the policy options according to the national contexts. To conduct this assessment, the first step consists in estimating the reduction of SUPB as a result of the implementation of a particular option (e.g. the EU set a reduction target of 80% of SUPB in five years). This may be estimated through international experiences review. Secondly, the socioeconomic and environmental effects can be reviewed and compared through a series of indicators. The values of these indicators will depend on the particular context (e.g. baseline SUPB consumption and production, collection costs, etc.). The following indicators are suggested:

#### Environmental impact:

Weight/quantity of total plastic carrier bags (% reduction);

Weight/quantity of single-use plastic carrier bags (% reduction);

Oil (kt saved);

Emissions (MtCO<sub>2eq</sub> avoided).

#### Economic indicators:

Costs reduction to retailers;

Revenues generated by a charge;

Net change to bag manufacturers;

Cost reduction for litter collection;

Cost reduction for waste management.

#### Social indicators:

Net change in employment in bag manufacture sector;

Households expenditure in alternatives to SUPB.

Thus, the assessment would provide information on the potential effect of the reduction of SUPB for different stakeholders, including plastic manufacturers, retailers, citizens and administration. The calculation and comparison of these indicators may robustly inform policy makers for sound decisions.

### STEP 3

#### Promote and develop alternatives:

Before any instrument is put in practice, there should be an assessment of the alternatives for SUPBs applications, in terms of national production capacity and needs, i.e. offer and demand. Indeed, these two aspects must go hand

in hand and should be boosted equally for effective switch to alternatives. Furthermore, this may represent an economic opportunity for the countries since often an important share of plastic bags is imported. A controversial issue may be the type of alternatives that should be promoted in response to the reduction/ban of SUPB. There is not a one-fits-all solution. A good approach may be to use a Life Cycle Analysis (LCA) approach to compare the different options. A general conclusion for LCA of alternatives to SUPB, including paper, woven polypropylene, compostable bags, is that it strongly depends on how many times the bags are reused. Furthermore, a limitation of LCA is to account for the economic cost of the leakage of plastic bags into the environment due to the difficulty to establish such costs. Bearing this in mind, the more potential for reuse of a particular option, the least impact it may have. Hence, the notion of reusability must be key when putting forward alternatives to SUPB. Furthermore, it should be considered that different options will respond to particular uses of SUPB, in a way that a certain alternative does not exclude any other.

Citizens may be reluctant to switch to alternatives for different reasons, mainly due to habits and higher prices. For this, it is needed a continuous communication on the benefits of using alternatives to SUPB and negative effects of the latter. At the start of implementing policy measures, alternatives may be subsidised with funds originated by ecotaxes to boost change.

Plastic bags with a minimum thickness (e.g. 50 microns) may be considered reusable bags, and thus alternatives to SUPB. In order to avoid legal bypass or promote options that are not safer for the environment, it is of utmost importance to set norms and labels for these alternatives, which guarantee minimum requirements for such bags.

Finally, the promotion of a particular alternative should consider the end-of-life phase in order to prevent harmful options to develop. This is particularly important for compostable bags, which are often referred as biodegradable bags and considered as one of the main alternatives to SUPB. However, important considerations should be made. On the one hand, irrespective of the material, these bags are single-use which implies impacts in terms of production.

As for final disposal, these bags are designed to biodegrade under industrial composting conditions, and thus a waste management system where organic waste is separated and treated is needed. In the absence of this system, compostable bags will have the same fate as conventional bags, therefore they will not solve the problem of plastic leakage into the marine environment nor in land. Currently, there is not any plastic material, whether it is made from fossil resources or bio-based, that allows for biodegradation in the natural environment

within a reasonable period of time. In addition, due to their low thickness, these bags have a short life span, meaning that they easily fragment in smaller pieces, which in turn may exacerbate the problem of removal and contribute to the generation of microplastics.

In case the bio-waste management system is in place, the legal framework should require that these bags to be in conformity with biodegradable standards (e.g. EN 13432) to avoid false claims on biodegradability. In order to check the compliance with standards and norms, countries should ensure that appropriate human and technical resources are available to test biodegradable plastics. Capacity building and exchange could be promoted across countries.

In any case, it seems necessary to build governmental and citizens' capacity and understanding in relation to the notions of biodegradability, since there are clear misconception and misunderstandings in many of the countries. Annex V includes clear explanation of the most relevant concepts.

Finally, clear information for the population on the final disposal of these bags is needed since compostable bags might be perceived as an environmental harmless option; thus misleading behaviour and resulting in increased littering. In addition, the mix of compostable with conventional plastic may lead to problems in mechanical plastics recycling.

## 3.2. Adoption and implementation of a policy option (step 4)

### STEP 4

After these preliminary steps, the policy option could be adopted and implemented, in consultation with the main concerned stakeholders. It should be noted that initiatives at a national level play an important role, including pilot projects which later on could be scaled up. As explained in Chapter 2, there are three main categories of options but the selected one may be a combination of them or a progression from "soft" to "hard" policy.

#### Promote voluntary agreements with retailers:

There are two main options within these agreements: (i) to stop free distribution of bags (regardless of their thickness or even the material) and (ii) to stop distributing SUPB. For this, the government authority can take the lead and count on associations of retailers as main counterparts. Other stakeholders should be invited to negotiation meetings such as plastic bag producers and consumers' organizations. The voluntary agreement should include additional actions such as awareness raising campaigns targeting customers or adaptation of the retail premises to accommodate alternatives to

SUPBs (e.g. making available a safe space for shopping trolleys or letting customers shop with their own bags and other containers). A master template for such agreements is provided in [Annex I](#).

Voluntary agreement may be applied to ultra-thin plastic bags, which are often out of the scope of compulsory charges, so the supermarkets can commit to take action against them, either by charging them or promoting alternatives.

However, in countries where the vast majority of the groceries sector is concentrated in small shops, additional measures are advised to reach that consumption model. In any case, voluntary agreements seem to be a convenient way to start reducing consumption, raising consumers' awareness to persuade them to start switching to SUPBs alternatives and without major disruption for businesses.

#### Implement regulatory economic instruments:

There are two main approaches for adopting legally backed economic instruments.

The first option consists of imposing compulsory charges to SUPB. It represents a legal enforcement of the voluntary agreement, meaning that the funds raised by this charge are kept by the retail sector. The government authority may decide on setting certain requirements for the retail sector, including:

- The types of plastic which are charged, generally defined by material and thickness;
- The bags that are exempted of the scope of the charge, e.g. ultralight plastic bags for weighting bulk products;
- Whether the retailers have flexibility in terms of price per plastic bag, or a minimum or fixed price is set for all retailers;
- To clearly indicate the price of the bag in the customers' bill; and
- To report on the amounts of bags being sold.

A master template for this kind of regulatory economic instrument is included in [Annex II](#) to the present document.

The second option, referred as a tax or ecotax, entails setting-up a tax recovery system where retailers are obliged to report on the number of plastic bags being sold and the associated revenues raised. These revenues may be allocated to the general budget of the government or to a new or existing environmental fund, which could fund waste prevention, collection and recycling, which in turn would create jobs. The funds could be also allocated to the adaptation of SUPB industry. For this, collaboration with the administration in charge of finance is essential to assess the feasibility of such instrument and agree on an implementation



roadmap. The whole process should be transparent to both retailers and consumers, conveying the “polluter pays” principle and message.

When implementing this tax, the government may consider the following elements:

- The physical or legal person that is subject to report and pay the fee;
- The types of plastic bags which are charged, generally defined by material and thickness;
- The amount to be levied per plastic bag;
- To clearly indicate the price of the bag in the customers’ bill;
- The tax collector entity;
- How to proceed with the report and payment, including templates and calendar;
- The inspection procedure; and
- The sanctions resulting from non-compliance.

In both cases, it is important to find out how much consumers are willing to pay, so the charge is big enough to change behaviour while considering the community’s buyer power. Another positive aspect of these instruments is that industry can progressively adapt, even get support through collected tax, and may not be so reluctant to this policy option being taken.

Another important element is to properly target all plastic bags considered as single-use, including those used for delivery service, in order to overcome possible by-passes. An option may be to charge all type of (plastic) bags to avoid overconsumption of non-charged ones.

However, a limitation of this option may be the application of the charge in contexts where small shops and even informal sector are notable, in a way that it may jeopardize implementation in larger commerce establishments.

A master template for this kind of regulatory economic instrument is included in [Annex III](#).

**Adopt a ban:** There are several types of bans on the production and consumption of SUPB. When deciding on the specific approach, a key aspect to bear in mind is the type of alternatives being put forward (see Step 3). A wise approach, taken by many countries, is to promote reusable bags, regardless of the material, as well as permitting plastic bags for specific uses (e.g. waste collection, agriculture, industry, etc.). In the context where there is a bio-waste management system in place, compostable bags may be permitted as well.

In order to clearly determine which bags are permitted or not, the legal instrument must include the following information:

- Definition of single-use plastic bag, in terms of material, and minimum thickness/grammage and volume. This type of bag is then the target of the ban. Plastic bags that are above a certain thickness/grammage threshold will be considered as multi-use or reusable bags and thus permitted.
- Exceptions to the ban, which may include:
  - certain applications such as industrial bags;
  - ultra-thin bags used to weight products in bulk; and
  - compostable bags.
- Labelling of the bags that are permitted in the country, often referred to adopted norms.
- System of penalties.

In addition, the legal texts often include the following information:

- The need to inform public authorities on the number of bags being sold. In some cases, registries of producers are established.
- Need to include bio-source content for permitted compostable bags.

The legal text might consider addressing the exceptions in the longer term, thus having different implementation periods. This might be the case for ultra-thin bags, which may be required to be compostable in the long term or just phased-out. In order to monitor and check the conformity with the law, the legal instrument may require the exceptions to the ban to have specific labelling, often according to standard and norms. This is particularly important for compostable bags, often required to be in conformity with EN 13432 or equivalent. For the other permitted bags, it may be needed to develop norms in case they do not exist yet. This allows for setting a clear a state of play and avoiding false claims. In any case, inspection authorities will need the means for verification.

In addition, there is the possibility to combine the ban with an economic disincentive to avoid overconsumption of some alternatives (e.g. paper and compostable bags). In terms of enforcement, it is necessary to adopt inter-institutional arrangements for the control and surveillance of ban implementation. A key aspect is to control the illegal production and import of plastic bags, which may represent an important burden on the public administration. In some cases, the control of the import of the raw material by a special procedure may be needed to fight against illegal manufacturing within the country.

A master template to develop a tailored made ban according to national context is included in [Annex IV](#) to the present document.

### 3.3. Accompanying measures (steps 5, 6, 7 and 8)

#### STEP 5

**Incentives to industry:** This is especially important in the case of ban, but also in the case of charges, in order to

bring the industry on-board. Eco-taxes could provide the funds for these incentives. Opportunities and guidance should be given to switch SUPBs producers to durable plastic applications or other product materials. Once the priorities have been set to promote certain alternatives to SUPB, options for upgrading their production capacity include: tax rebates, research and development funds, technology incubation, public-private partnerships, support to projects that recycle disposable items and turn waste into an alternative to SUPB, and reduction/abolishment of taxes on the import of material used to make alternatives.

In the case of bans, it might be needed to financially support the adaptation of SUPB producers to other options or businesses. For this, a plan should be elaborated, identifying the type of businesses that could benefit from public funds. The potential public grant to a specific company may be based on the contribution of SUPB to its annual turnover. Once the businesses are identified, they could be invited to request funds by submitting an adaptation plan, which may be evaluated by experts. Alternatively, public aid could provide expertise for these companies so they are advised on best ways to adapt.

In the case of important presence of informal economy in the plastic bags industry, this informal sector should also be supported in phasing-out SUPB. A public funded programme could be established to offer other income sources such as grouping in cooperatives and training on the production of alternatives.

#### STEP 6

**Upgrade the waste management system:** Eco-taxes are of great support in raising funds to enhance collection,

recycling and final waste treatment, which are key to avoid plastic bags ending up as marine litter. Even if SUPB are eradicated, it should be considered that reusable bags are often made out of plastic (polypropylene, nylon, etc.), and thus their collection and recycling should be promoted to avoid improper disposal. In any case, further collaboration between producers and recyclers should be boosted to ensure higher recycling rates. This might be supported by including these bags within packaging EPR scheme in the country, if they exist, or to promote the adoption of such EPR schemes.

At a later stage, if compostable bags are regarded as a preferred alternative, the system should evolve to collect and treat bio-waste separately. Given the high organic

waste proportion in many countries in the region, pilot projects on domestic and industrial composting could be implemented to assess the feasibility to extend the system to the entire country. This should be regarded as a necessary condition before legally promoting composting bags.

#### STEP 7

**Communication and participation:**

The policies to phase out the production and use of SUPB have proven to be a very sensitive issue. In fact, they play an important role in our daily life. For this reason, it is important to actively communicate and engage citizens and stakeholders in any policy being made at this regard. This communication could be based in the positive effects of switching towards reusable bags in terms of money savings on a short-term, compared to continuous SUPB purchase, rather than on general messages on the negative effects of plastic bags.

#### STEP 8

**Review and adapt:** All policy measures should include a monitoring system to know how the production and

consumption of bags and other options evolve over time. For example, plastic bags producers may be required to report in a given time period about the production and destination of their products. These provisions are often part of the policy instruments and are described above. Based on this, if the objectives are not met, a review should be made to improve implementation or adopt additional measures.

## Annex 1

# Master template for voluntary agreements in the retail sector





## NOTE

This Annex presents a master template to elaborate a voluntary agreement for the reduction of single-use plastic bags in the retail sector. Each chapter of the text of the agreement is explained in italics, and some specific wording is proposed. Text in brackets may be customized according to parties' needs.

Two real examples, corresponding to Tunisia and Spain (region of Catalonia) can be consulted here:

<https://arc.fastfolder.net/index.php/s/VzDo3Jtnep1SaaU>

# Voluntary agreement for the reduction of plastic bags [in the retail sector]

*The agreement might be with parties other than the retail sector, such as producers and civil society organizations*

[Date]

*It might be placed at the end, as appropriate*

BETWEEN

*Identification of each of the signatory parties, as well as the legal representative, and including information such as address, identification number, and other details as appropriate. Often, the first party is a public authority as a promoter of the agreement. The other parties may be associations of private entities (e.g. retail associations, commerce associations, etc.)*

[Party 1]

[Party 2]

[...]

Whereas:

*Ascertainment on the issue of plastic bags according to the national context and roles of the signatories. It should particularly contain information on the production and use of plastic bags in the country, as well as any relevant initiative that have addressed this issue and consultation meetings prior to the agreement. A number of statements are provided herewith as examples.*

- Plastics are one of the main materials of the modern economy due to their multiple properties, applications and low cost. Their use has been growing exponentially since the 50s and it is expected to double in the next 20 years.
- Single-use plastic bags have become an icon of

plastic pollution and linear economy approach. The leakage of bags into the environment poses threats not only to biodiversity but also to the society, by hampering economic development and affecting public health.

- Single-use plastic bags rank among the most commonly found marine litter items in the Mediterranean Sea. The Regional Plan on Marine Litter Management in the Mediterranean, adopted by all the Contracting Parties to the Barcelona Convention in 2013, urges national authorities, among others, to take action to reduce single-use plastic bags.
- According to the study [xxx] the consumption in [xxx] is estimated in [xxx] bags/person/year.
- [Party 1] implements the [name of a policy framework/instrument that may address plastic bags waste, such as national waste plans].
- [...]

Have adopted the following

AGREEMENT:

## Chapter 1. Subject matter

*The target of the agreement should be clearly identified. It should include the objectives of the agreement, reduction target and timing. The following wording is proposed as a basis. In the case that the agreement seeks to remove all single-use plastic bags from the supermarkets, an alternative wording is proposed*

The following Agreement aims at establishing a cooperation framework among the signatories with the ultimate goal of correcting the excessive and unnecessary use of single-use plastic bags, defined as

those which wall thickness is below [50-40] microns. The focus is on those that have handles, generally used as shopping carrier bags.

[The Agreement seeks to achieve a reduction of single-use plastic bags of [xx]% by 20[xx], respect to baseline situation in the year 20[xx].]

[The Agreement seeks to achieve the eradicate the distribution of single-use plastic bags in supermarkets as for [date].]

## Chapter 2. Commitments by the signatories

This section identifies specific tasks for each of the signatories. It can reflect the commitments by the promoter (public authority) and the other signatories (often private organisations). A number of commitments are suggested as example.

The [name of the public authority] commits to:

- Prepare and implement a communication plan to disseminate the objectives and actions of the Agreement.
- Provide technical, institutional and communication support to the actions taken by the signatories of the agreement for the reduction of single-use plastic bags.
- To authorize the businesses/associations signatories of the agreement to use the logo of the [name of the public authority] to implement a campaign on the reduction of single-use plastic bags.
- Participate in the Steering Committee of the Agreement to follow up the results and propose new actions.

The signatory parties commit to:

- Promoting their associates to become members of the Agreement.
- Actively participate at the Steering Committee of the Agreement, informing the public authorities on the results achieved by the member entities.
- Participate in the design of measures and the indicators to implement them.
- Promote that their associates study the opportunities to reduce the number of single-use plastic bags and assess the feasibility of alternative measures.
- Member associates select a programme of measures to reduce the use of single-use plastic bags according to the characteristics of the commerce. The Appendix I provides examples of possible actions that might be taken by the associate members.

- Use the logo of the [name of the public authority] in the campaign to reduce single-use plastic bags, with prior conformity of the [name of the public authority] of the communication materials.

## Chapter 3. Mechanisms to become member of the Agreement

*The Agreement may be open to other stakeholders to become members, thus engaging more parties than the signatories.*

The companies, individually or collectively under an association, may join the Agreement during its validity.

They will have to address the form presented in Appendix II to the [name of the public authority], including information on concrete actions to reduce single-use plastic bags.

The [name of the public authority] will inform the Steering Committee of the Agreement on the new members and the proposed measures will be evaluated within this committee.

## Chapter 4. Validity

*It may be stated a time horizon to achieve the expected result, or it might be left open until the achievement of the results. Both wordings are included as example.*

[The validity of this Agreement will be of [x] years after the date of signature, and it is extendable by agreement of the signatories.]

[The agreement is valid until the achievement of the expected results or until the signatories decide otherwise.]

## Chapter 5. Follow up and assessment

*The means to follow up the implementation and results of the agreement may be established in this chapter, including the intervening parties and calendar. A steering committee may be established for this purpose. The following wording is suggested as example.*

A Steering Committee is established to follow up and assess the achievements of the Agreement. It is composed of [one or more representatives] [the delegates] of the signatory parties.

The Steering Committee will meet at least [x] times per year with the following objectives:

- Proposal and follow up of the actions and measures to achieve the objectives of the Agreement.

- Definition of the indicators that allow for determining the achievement of the results of the Agreement.
- Evaluation and communication of the results obtained by the measures, safeguarding confidentiality of the businesses members.
- Inform on the new members joining the Agreement.

Final provisions for the adoption of the Agreement. The following wording is proposed.

And as proof of conformity, all parties formalize the Agreement in the place and date aforementioned.

[signature and  
identification of Party 1]

[signature and  
identification of Party 2]

[signature and  
identification of Party x]

[...]





# Appendix I.

## Examples of actions to implement to achieve the objectives of the Agreement

*The appendix may establish the rationale of the different measures that could be implemented as well as specific actions that may facilitate the adoption by the members of the agreement. Wording is proposed as it follows.*

### The following measures have the following rationale:

- Orientation of the choices towards more sound systems from the environmental, economic and social perspective.
- The respect to consumers' choice, regardless of the promotion of environmental public awareness.
- Incentivize the economic sector that offers bags or other means to adjust its offer to a new social demand, avoiding unique options that reduce the choice and the research of other solutions.
- Each of the measure should have associated indicators in terms of prevention and reuse that allow for assessing the achieved results.

### Proposal of measures:

- Awareness campaigns for the reuse and recycling of plastic bags.
- Making space available to promote the use of shopping trolleys.
- Mechanisms to control and limit distributed bags.
- Include in the offer reusable freezer bags.
- Stop the delivery of single-use plastic bags
- Include in the offer reusable bags of different materials (tissue, paper or plastic) and capacity.
- Include in the offer reusable cardboard boxes
- Allow customers to enter the establishment with their own bags and other means.
- Use economic instruments by charging a fee on single-use plastic bags, or offering discounts to customers that opt for reusable options.

## Appendix II.

# Commitment to become a member of the Plastic Bag Agreement

*The following form is proposed to invite stakeholders to become members of the Agreement and implement specific actions. The following wording is proposed.*

[place] [date]

Mr/Mrs \_\_\_\_\_, acting as representative of the company/association \_\_\_\_\_ with address \_\_\_\_\_ in \_\_\_\_\_.

### STATES:

- The voluntary commitment of the company/association \_\_\_\_\_ to become member of the Agreement established by [Party 1], Party [2], [...] and [...] to reduce single-use plastic bags.
- To be aware and acceptance of the objectives, rights and duties resulting from the aforementioned agreement.
- In order to attain the objectives of the Agreement, the company/association \_\_\_\_\_ commits to implement in the commercial premises the following actions<sup>20</sup>:
  - [...]
  - [...]
  - [...]

And as proof of commitment, this document is signed in the place and date aforementioned.

[Signature of the representative]

---

<sup>20</sup>. See examples in [Appendix I](#)

## Annex II

# Master template for regulatory economic instrument: compulsory charges on plastic bags





## NOTE

This Annex presents a master template to elaborate a regulatory economic instrument to impose compulsory charges on the distribution of single-use plastic bags. There might be two approaches to pass this economic instrument:

to embed/add this provision within a larger or existing legal instrument, such as a framework waste law; or

to enact a specific legal instrument

Each chapter of the text of the legal instrument is explained in italics, and some specific wording is proposed. Text in brackets may be customized according to instrument promoter's needs.

Two real examples, corresponding to Spain (State scope) and Spain (region of Catalonia scope) can be consulted here:

<https://arc.fastfolder.net/index.php/s/VzDo3Jtnep1SaaU>

# Master template for Regulatory economic instrument: compulsory charges on plastic bags

## Foreword

*This section may contain information regarding the motivation and background for enacting/adding the provisions detailed hereinafter, as well as the process of consultation and approval. This will fully depend on each national context.*

## Article 1. Objective

*This article may state the aim of the legal instrument. Generally, the objective of reducing the consumption of plastic bags should be addressed. The following wording is provided as example.*

This [name of the legal instrument] aims at adopting measures to reduce the consumption of plastic bags in order to prevent and reduce the negative impacts that related plastic waste pose on the environment, economy and society.

## Article 2. Scope of application

*This article may determine the geographical and administration area where the provisions are applied. The following wording is proposed.*

This [name of the legal instrument] concerns all plastic bags being put in the market in the territory of [name of the country].

## Article 3. Definitions

*Further to other definitions contained in previous legal instruments, this article may clearly identify the bags that are subject to the provisions of the legal instrument, as well as those that are exempted. Definitions are provided for the main types of bags, others should be included as appropriate. As for the definition of single-use and ultra-light plastic bags, based on international experience, it is recommended to use a threshold of 40-50 microns and 15-20 microns respectively.*

[Reference to any existing legal instruments containing relevant definitions for the scope of this legal instrument]

- a) "plastic": generic term used in the case of polymeric material that may contain other substances to improve performance or reduce costs;
- b) "plastic bags": bags, with or without handles, made out of plastic, that are provided to consumers in goods and products selling points;
- c) "single-use plastic bags": light plastic bags, considered as those having a wall thickness below [xx] microns;
- d) "cashier bags": bags that are provided, paid or free of charge, at the cashier selling points as means to carryout grocery products;
- e) "ultra-light plastic bags": plastic bags which wall thickness is below [xx] microns, which are necessary for hygiene reasons, or which are

provided as primary packaging for bulk products such as fruits, vegetables, meat, poultry or fish, among others, when the use supports the prevention of food waste;

- f) "oxo-degradable plastic bags": bags made out of conventional plastic materials with artificial additives that fragment into small pieces.
- g) "compostable plastic bags": bags made out of plastic capable to decompose in aerobic environments that are maintained under specific controlled temperature and humidity conditions.

## Article 4. Measures to reduce plastic bags

*This section may include the specific measures to avoid free distribution of plastic bags as well as the starting implementation date. Different phases and different actions (e.g. bans, which are not addressed in this template) may be considered to target the aforementioned types of plastic bags, as well as the exceptions. An example is provided which should be adapted to the national policy strategy.*

As from [date]:

- a) It is forbidden the free distribution of plastic bags at the selling points of goods and products, [with the exception of ultra-light plastic bags][with the exception of compostable bags] [...].
- b) [The merchants must charge [xx national currency] for each plastic bag provided to customers.] [The

merchants must charge a fee for each plastic bag provided to customers of at least [xx national currency].] [The merchants must charge a fee for each plastic bag provided to customers]

- c) Merchants will inform the consumers on the price of the plastic bags, exposing it in a visible place.
- d) Merchants will include the plastic bag and price in the bill as a separate grocery product.

## Article 5. Labeling of plastic bags

*In the event compostable bags are exempted from the fee, a specific labelling should be needed for those bags, often referring to a national or international norm. For other bags, whether they are paid or free of charge, additional labelling conditions may be set. The following wording provides examples.*

- 1) Compostable bags must include the label that indicates that it can be composted according to the norm [xxxxx] and that they can be disposed in specific bio-waste containers.
- 2) Plastic bags must include the label that indicates that they can be recycled and that they can be disposed in specific containers.

## Article 6. Sanctions

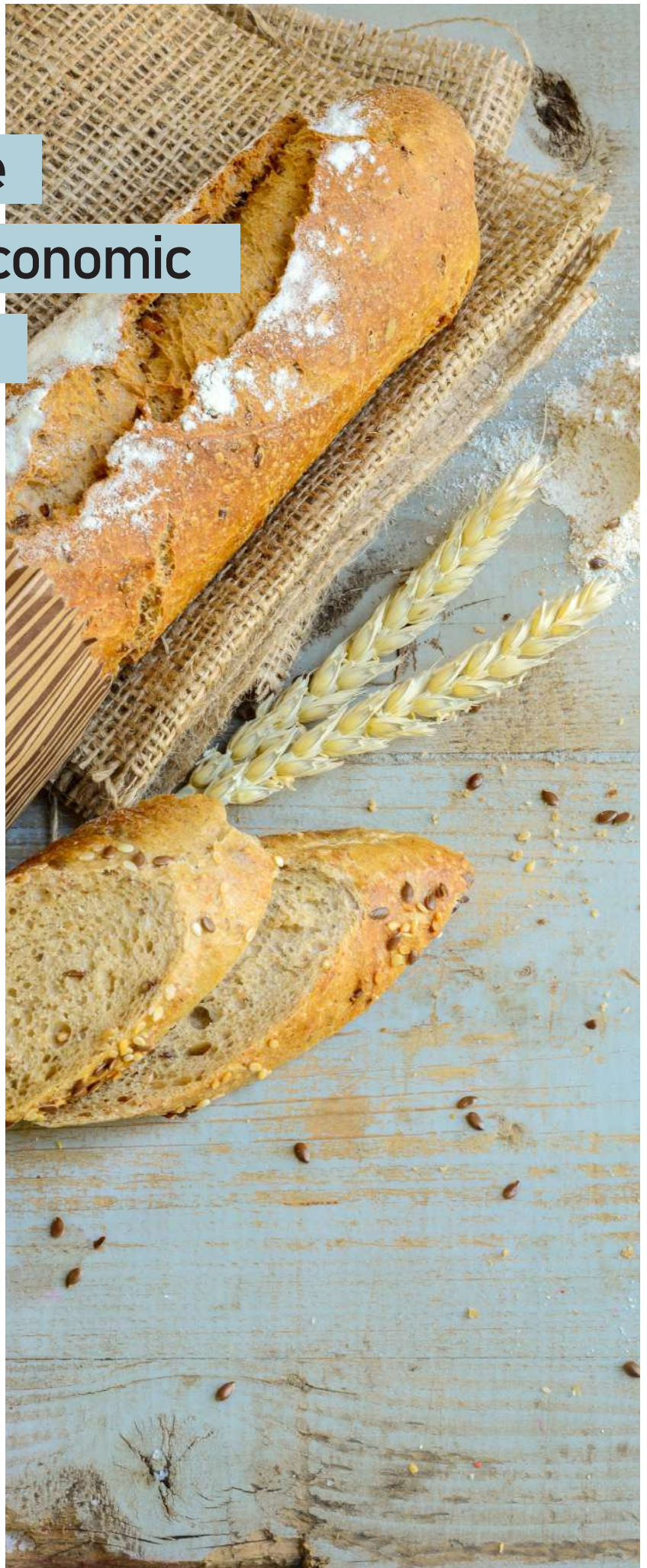
*The type of in compliance and related sanction may be specified, or referred to an existing legal document.*





## Annex III

# Master template for regulatory economic instrument: Tax





## NOTE

This Annex presents a master template to elaborate a regulatory economic instrument to enact a tax (often referred as eco-tax) on the distribution of plastic bags at the point of sale.

Each chapter of the text of the legal instrument is explained in italics, and some specific wording is proposed. Text in brackets may be customized according to instrument promoter's needs.

Two real examples, corresponding to Ireland and Bosnia and Herzegovina:

<https://arc.fastfolder.net/index.php/s/VzDo3Jtnep1SaaU>

# Master template for Regulatory economic instrument: tax

## Foreword

*This section may contain information regarding the motivation and background for enacting/ adding the provisions detailed hereinafter, as well as the process of consultation and approval. This will fully depend on each national context.*

## Article 1. Objective

*This article may state the aim of the legal instrument. Generally, the objective of reducing the consumption of plastic bags should be addressed. The following wording is provided as example.*

This [name of the legal instrument] aims at adopting measures to reduce the consumption of plastic bags in order to prevent and reduce the negative impacts that related plastic waste pose on the environment, economy and society.

## Article 2. Definitions

*Further to other definitions contained in previous legal instruments, this article may clearly identify the bags that are subject to the tax, as well as those that are exempted. Definitions are provided for the main types of bags, others should be included as appropriate. Wording may be slightly changed to accommodate the specificities on which the tax will apply. As for the definition of single-use and ultra-light plastic bags, based on international experience, it is recommended to use a threshold of 40-50 microns and 15-20 microns respectively.*

[Reference to any existing legal instruments containing relevant definitions for the scope of this legal instrument]

- a) "plastic": generic term used in the case of polymeric material that may contain other substances to improve performance or reduce costs;
- b) "plastic bags": bags, with or without handles, made out of plastic, that are provided to consumers in goods and products at points of sale;
- c) "single-use plastic bags": light plastic bags, considered as those having a wall thickness below [xx] microns;
- d) "reusable plastic bags": plastic bags made to be used more than once, considered as those have a wall thickness above [xx] microns;
- e) "cashier bags": bags that are provided, paid or free of charge, at the cashier selling points as means to carryout grocery products;
- f) "ultra-light plastic bags": plastic bags which wall thickness is below [xx] microns, which are necessary for hygiene reasons, or which are provided as primary packaging for bulk products such as fruits, vegetables, meat, poultry or fish, among others, when the use supports the prevention of food waste;
- g) "oxo-degradable bags": bags made out of conventional plastic materials with artificial additives that fragment into small pieces.
- h) "compostable plastic bags": bags made out of plastic capable to decompose in aerobic environments that are maintained under specific controlled temperature and humidity conditions.

## Article 3. Scope of application

*This article may determine the geographical and administration area where the provisions are applied. It may establish the starting date to implement the tax, as well as on which items and who is liable for paying it. As for reusable bags, even if they are not levied, they might be charged to avoid overconsumption. The following wording is proposed.*

- 1) This [name of the legal instrument] concerns single-use plastic bags distributed at points of sale in the territory of [name of the country].
- 2) As for [date] there shall be charged in respect of the supply to customers, at the point of sale to them of goods or products to be placed in single-use plastic bags in or at any shop, supermarket, service station or other sales outlet.
- 3) An accountable person shall be accountable for and liable to pay the levy.
- 4) The amount of the charge shall be [xx national currency] for each plastic bag.
- 5) The following classes of plastic bags are excepted from the tax:
- 6) [Ultra-light plastic bags]
- 7) [Reusable plastic bags sold to customers for a sum of not less than [xx national currency].
- 8) Where single-use plastic bags are charged by an accountable person, it should be itemised on any invoice, receipt or docket issued to the customer.

## Article 3. Collection of the tax

*This article may determine who and to whom the tax should be paid, including the time period and reporting format.*

- 1) The [administration of finance] [...] shall be the collection authority to whom the tax shall be payable.
- 2) The tax should be paid [time period] per year, according to the number of plastic bags commercialised by the accountable person.
- 3) The tax payer should submit a proof of payment along with the report as per Article 4, [number] days following the end of an accounting period.

## Article 4. Registry and reports

*This section may include how the entities subject to the tax should keep record of the plastic bags being sold and how this should be reported to the tax collection authority.*

- 1) The accountable person shall keep record for the quantities of plastic bags purchased, the consumption of plastic bags and the state of the stock for those subject to the tax, as well as submitted reports and proofs of payments.
- 2) The accountable person shall keep record of those plastic bags being used that are not subject to the tax.
- 3) The accountable person will submit to the [collection authority] a report detailing the number of commercialised plastic bags, by using the form in Appendix I, and proof of payment.

## Article 5. Inspection and sanctions

*The type of incompliance and related sanction may be specified, or referred to an existing legal document. The non-submission of reports and proofs of payments shall be considered as non-compliance and shall imply monetary sanctions.*

- 1) The supervision for the implementation of the [name of the legal instrument] is [name of the inspection authority].
- 2) The non-compliance by the accountable person of the reporting and payment provisions shall be sanctioned with [national currency].

# Appendix I.

## Report of commercialised bags

Time period	Number of bags purchased subject to the tax	Number of bags commercialised subject to the tax	Tax levied per unit	Total tax revenue	Number of bags purchased not subject to the tax	Number of bags commercialised not subject to the tax
1st semester 20xx	xxxx	xxxxxx	xx	xxxxxx	xxxx	xxxxxx
2nd semester 20xx	xxxx	xxxxxx	xx	xxxxxx	xxxx	xxxxxx
...		.....	.....	.....		...





## Annex IV

# Master template for command and control instruments: Ban



## NOTE

This Annex presents a master template to elaborate a legal instrument to ban single-use plastic bags. Despite existing different approaches, for this template the ban includes manufacturing, import, distribution and use.

Each chapter of the text of the legal instrument is explained in italics, and some specific wording is proposed. Text in brackets may be customized according to instrument promoter's needs.

Four real examples, corresponding to Spain, France, Morocco and USA (State of California) can be consulted here:

<https://arc.fastfolder.net/index.php/s/VzDo3Jtnep1SaaU>

# Master template for command and control instruments: ban

## Foreword

*This section may contain information regarding the motivation and background for enacting/adding the provisions detailed hereinafter, as well as the process of consultation and approval. This will fully depend on each national context.*

## Article 1. Objective

*This article may state the aim of the legal instrument.*

This [name of the legal instrument] determines the types of plastic bags that are permitted in the territory of [name of the country], including the [manufacturing], [import], [distribution] and [use].

## Article 2. Definitions

*Further to other definitions contained in previous legal instruments, this article may clearly identify the bags that are subject to the provisions of the legal instrument, as well as those that are exempted. Definitions are provided for the main types of bags, others should be included as appropriate. As for the definition of single-use and ultra-light plastic bags, based on international experience, it is recommended to use a threshold of 40-50 microns and 15-20 microns respectively.*

- a) "plastic": generic term used in the case of polymeric material that may contain other substances to improve performance or reduce costs;

- b) "plastic bags": bags, with or without handles, made out of plastic, that are provided to consumers in goods and products selling points;
- c) "single-use plastic bags": light plastic bags, considered as those having a wall thickness below [xx] microns;
- d) "cashier bags": bags that are provided, paid or free of charge, at the cashier selling points as means to carryout grocery products;
- e) "ultra-light plastic bags": plastic bags which wall thickness is below [xx] microns, which are necessary for hygiene reasons, or which are provided as primary packaging for bulk products such as fruits, vegetables, meat, poultry or fish, among others, when the use supports the prevention of food waste;
- f) "oxo-degradable bags": bags made out of conventional plastic materials with artificial additives that fragment into small pieces.
- g) "compostable plastic bags": bags made out of plastic capable to decompose in aerobic environments that are maintained under specific controlled temperature and humidity conditions

## Article 3. Measures

*This section shall contain the provisions to ban specific types of plastic bags. Different phases and different actions may be considered to target the aforementioned types of plastic bags, as well as the exceptions. An example is provided which should be adapted to the national policy strategy.*

1. As from [date]:

- a) [Single-use plastic bags to manufacturing, import, distribution and use is forbidden, [with the exception of compostable bags.] [It is forbidden to distribute single-use plastic bags to customers at the points of sale, [with the exception of compostable bags].]
- b) [It is forbidden to distribute oxo-degradable plastic bags to customers at the points of sale.]
- c) [Other types of bags distributed at the point of sale must have a minimum charge of [national currency].]

2. As from [date]:

- a) [The distribution of ultra-light plastic bags is forbidden, unless they are compostable.]
- b) [Re-usable bags must have a minimum [xx]% of recycled material.]

*bags, whether they are paid or free of charge, additional labelling conditions may be set. Additional provisions may be set for permitted bags. The following wording provides examples.*

- 1) Permitted bags shall include the name of the manufacturer/importer, as well as manufacturing date.
- 2) The material, dimensions, volume and thickness.
- 3) Compostable bags must include the label that indicates that it can be composted according to the norm [xxxxx] and that they can be disposed in specific bio-waste containers.
- 4) Permitted plastic bags must include the label that indicates that they can be recycled and that they can be disposed in specific containers.
- 5) Re-usable bags must indicate the % of recycled content.

## Article 4. Labelling

*In the event compostable bags are exempted from the fee, a specific labelling should be needed for those bags, often referring to a national or international norm. For other*

## Article 6. Sanctions

*The type of incompliance and related sanction may be specified, or referred to an existing legal document.*





## Annex V

### Terminology



This annex intends to provide a common understanding on notions related to so-called bio-plastics and biodegradable bags. Most of the definitions are gathered from the document UN Environment report Biodegradable Plastics and Marine Litter. Misconceptions, concerns and impacts on marine environments (2015). It is suggested to read it for further knowledge.

## Plastic:

Material consisting of any of a wide range of synthetic or semi-synthetic organic compounds that are malleable and so can be molded into solid objects. Plastics are typically organic polymers of high molecular mass and often contain other substances. They are usually synthetic, most commonly derived from petrochemicals, however, an array of variants are made from renewable materials such as polylactic acid from corn or cellulose from cotton linters.

## Bio-plastic:

The term bio-plastic is a term used rather loosely. It has been often described as comprising both biodegradable plastics and bio-based plastics, which may or may not be biodegradable. To avoid confusion it is suggested that the description "bio-plastic" is qualified to indicate the precise source or properties on the polymer concerned.

## Bio-based plastics:

Bio-based plastics are derived from biomass such as organic waste material or crops grown specifically for the purpose. Some polymers made from biomass sources, such as maize, may be non-biodegradable.

Common definitions regarding the biodegradation of polymers.

## Degradation:

The partial or complete breakdown of a polymer as a result of e.g. UV radiation, oxygen attack, biological attack. This implies alteration of the properties, such as discolouration, surface cracking, and fragmentation.

## Biodegradation:

Biological process of organic matter, which is completely or partially converted to water, CO<sub>2</sub>/methane, energy and new biomass by microorganisms (bacteria and fungi). The conditions under which

"biodegradable" polymers will actually biodegrade vary widely. For example, a single-use plastic shopping bag marked 'biodegradable' may require the conditions that commonly occur only in an industrial composter (e.g. 50°C) to breakdown completely into its constituent components of water, carbon dioxide, methane, on a reasonable or practical timescale.

## Mineralisation:

In the context of polymer degradation, it refers to the complete breakdown of a polymer as a result of the combined abiotic and microbial activity, into CO<sub>2</sub>, water, methane, hydrogen, ammonia and other simple inorganic compounds.

## Biodegradable:

Capable of being biodegraded.

## Compostable:

Capable of being biodegraded at elevated temperatures in soil under specified conditions and time scales, usually only encountered in an industrial composter (standards apply).

## Oxo-degradable:

Conventional polymers, such as polyethylene, which have had a metal compound added to act as a catalyst, or pro-oxidant, to increase the rate of initial oxidation and fragmentation. They are sometimes referred to as oxy-biodegradable or oxo-degradable. Initial degradation may result in the production of many small fragments (i.e. microplastics), but the eventual fate of these is poorly understood. As with all forms of degradation the rate and degree of fragmentation and utilisation by microorganisms will be dependent on the surrounding environment. There appears to be no convincing published evidence that oxo-degradable plastics do mineralize completely in the environment, except under industrial composting conditions.

## EN 13432:

European compostability standard for biodegradable packaging designed for treatment in industrial composting facilities and anaerobic digestion, requiring that at least 90% of the organic matter is converted into CO<sub>2</sub> within 6 months, and that no more than 30% of the residue is retained by a 2mm mesh sieve after 3 months composting. Standard EN 14995 describes the same requirements and tests, however it applies not only to packaging but plastics in general. The same holds for ISO 18606 "Packaging and the environment – Organic Recycling" and ISO 17088 "Specifications for compostable plastics".

