

The EU Single-Use Plastics Directive and its impact on tobacco products: A policy analysis

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ABSTRACT

Single-use plastics (SUPs), which are used only once or briefly, have become a significant source of litter on European beaches and seas. The European Union (EU), approved the SUP Directive after acknowledging the significant harm that SUPs cause to the environment, human health, and the economy. The SUP Directive requires all relevant parties, including plastics manufacturers, recyclers, retailers, and consumers, to take the appropriate actions and make the necessary investments to protect the environment.

The primary objective of the SUP Directive is to prevent and minimize the negative effects that some plastic products have on the environment, particularly the marine environment, as well as on human health. In an effort to combat marine litter, the Directive imposes restrictions and criteria on SUPs that fall under the purview of specific categories and items

made from oxo-degradable plastic. This includes, among other things, the phase-out of unnecessary SUPs and oxo-degradable plastic, the reduction of SUP consumption and the use of reusable substitutes, the adoption of marking and labelling standards, and the development of extended producer responsibility programs (EPR).

Tobacco products with filters and filters marketed for use in conjunction with tobacco products are among the categories covered by the SUP Directive, owing to the fact that tobacco product filters containing plastic are the second most littered single-use plastic items on EU beaches. The implementation of the SUP Directive presents a unique opportunity to educate consumers about the plastic found in tobacco filters and filters marketed for use in conjunction with tobacco products.

INTRODUCTION

Modern life has become completely reliant on plastics. Europe is one of the biggest users of the millions of tons of plastics produced annually worldwide. Since the 1960s, the amount of plastic produced globally has multiplied twentyfold, reaching 322 million tons in 2015, and over the next 20 years, it is predicted to double once more. The EU produces over 26 million tons of plastic waste annually¹. However, the plastics industry, with over 55000 companies and an annual turnover of more than 350 billion euros (2019), gives direct employment to more than 1.56 million people in Europe².

Plastic pollution arises from the production and use of plastics. With such high plastic consumption rates, plastic

litter production has increased dramatically. Studies show that plastics make up 80% of marine litter, yet <30% of the plastic litter produced in the EU is collected for recycling¹. The rising usage of 'single-use' plastics, or packaging and other consumer goods that are discarded after only one use, rarely recycled, and prone to littering, is exacerbating this situation. These include, among other things, cups for beverages, along with their covers and lids, food and drink containers meant for immediate use, cutlery, straws, tobacco goods with filters, and filters advertised for use in combination with tobacco products.

Despite the benefits it brings to society, the use of plastics, together with their production and discards, is associated

with key challenges in the environmental, economic and public health sectors, including a significant impact on biodiversity, the increase of greenhouse gas emissions, tourism, shipping, fisheries and human health.

COMMENTARY

The Single-Use Plastics Directive (SUP)

The EU took steps to address plastic pollution and marine litter, as well as to quicken the transition to a circular plastics economy. These actions included policies and the creation of a legal framework to successfully manage such adverse consequences. The European Commission adopted the 'European Strategy for Plastics in a Circular Economy'¹ in 2018 within the framework of the 'Circular Economy Action Plan'³, which included suggestions for updating EU waste legislation. This strategy aims to protect the environment and reduce marine litter, greenhouse gas emissions, and dependence on imported fossil fuels. Additionally, it aimed to change how plastic goods were created, manufactured, used, and recycled in the EU. These changes were meant to foster safer, more sustainable, and more efficient plastic manufacturing and consumption patterns. Tackling single-use and transient plastics were among the main priority actions envisaged in the EU Plastics Strategy as a starting point to curb plastic waste.

SUPs that were frequently discovered on beaches, products made of oxo-degradable plastic (i.e. made of 'plastic materials that include additives which, through oxidation, lead to the fragmentation of the plastic material into micro-fragments or to chemical decomposition'), and abandoned fishing gear, were all targeted by the EU through the SUP Directive⁴ that was adopted in 2019. On the basis of a number of variables, including the existence of products that can replace plastics, the Directive establishes numerous measures that apply to various product categories.

In particular, the provisions of the SUP Directive include:

- Prohibition on placing on the market: ban from the market of certain SUPs and all products that contained oxo-degradable plastic;
- Consumption reduction obligations: by establishing national reduction objectives, making substitute items accessible at the point of sale, or making sure that single-use plastic products cannot be given away for free, Member States are required to ensure a decrease in the use of specified SUPs;
- Product and design requirements: only if the caps and lids stay on the containers during the intended usage stage of the product may SUPs with plastic lids and caps be sold;
- Marking and labelling requirements: certain goods must be clearly and uniformly labelled to state whether they include plastic, the harm caused by littering, and how to properly dispose of the goods' waste;
- Extended producer responsibility: producers of some SUPs must be subject to extended producer responsibility programs mandated by the Member States, which require

them to pay for waste management, cleanup, and public awareness campaigns;

- Separate collection: by 2025, Member States must adopt deposit-refund programs or distinct collection targets for producers to collect 77% of specific SUPs independently. The target is set at 90% by 2029; and
- Awareness-raising measures: Member States are required to educate consumers on the consequences of discarding certain SUPs and fishing equipment, as well as about the recycling and waste management options available for these products.

The Guidelines on the application of the SUP rules⁵ that were published by the European Commission in 2021 aimed to contribute to the smooth, correct and harmonized implementation of the Directive, by providing among others the definition of plastic (as defined by the REACH Regulation)⁶ and SUPs, as well as by shedding light on specific provisions of the Directive.

How will the SUP impact tobacco products in the EU

Tobacco product filters containing plastic and filters marketed for use in combination with tobacco products are one of the product categories tackled by the SUP Directive, given their single-use nature and the subsequent environmental impact caused by the post-consumption waste of these products. On the list of the top ten SUP items that were reported on the EU beaches in 2016, cigarette filters were ranked second among all SUPs, with a total number of 21854 cigarette filters collected, which represented 21% of all SUPs and 17% of general plastic items⁷.

Tobacco products with filters and filters marketed for use in combination with tobacco products constitute a chemically modified natural polymer⁵ and, on the basis of other criteria for these products, fall within the scope of the SUP Directive.

The main product-specific criteria to determine whether a tobacco product with a filter or a filter marketed for use in combination with a tobacco product, falls within the scope of this Directive, are:

1. Product is a tobacco product (as defined in point 4 of Article 2 of the Tobacco Products Directive⁸) and the product contains a filter.
2. Product is a separate filter for use with tobacco products.

The SUP Directive applies to a variety of related tobacco products, such as cigarettes and cigars with plastic filters, individual single-use filters, and electronic devices for use with heated tobacco products that also feature plastic single-use filters. Loose tobacco for use in a pipe or a hand-rolled cigarette without a plastic filter is excluded, as are electronic cigarettes or vape devices, including plastic or non-plastic filters⁵.

Tobacco products with filters (and filters marketed for use in combination with tobacco products) are included in the provisions of the Directive with regard to: a) Marking and labelling requirements, b) Extended Producer Responsibility, and c) Awareness raising measures. Member states are required to make sure that:

- Consumers are informed of the presence of plastics in the product, the effects of littering those filters on the environment, and the best way to dispose of these products by a conspicuous, easily legible, and permanent marking on the packaging of tobacco products with filters (and filters marketed for use in combination with tobacco products) that are placed on the market;
- The costs of public collection systems, waste collection, transport, and treatment, as well as the costs of clearing up litter caused by tobacco products and the costs of data collection and reporting are all covered by the manufacturers of tobacco products; and
- Customers are informed about the availability of reusable alternatives, reuse systems, and waste management choices for those SUPs, the effects of littering and other improper methods of SUP waste disposal, and the effects of those methods on the sewer network.

The Commission Implementing Regulation⁹ that was published in 2020 clarified further and laid down rules on harmonized marking specifications on certain SUPs, including tobacco products with filters (and filters marketed for use in combination with tobacco products). The marking should comply with the following requirements:

1. Position of the marking: in order to ensure that the health warnings required by the Tobacco Products Directive are visible, the marking for tobacco products with filters must be placed horizontally on the exterior back surface of the unit package and on the outside packaging⁸.
2. Size of the marking: for tobacco products with filters, the minimum size of the marking should be 1.4 cm × 2.8 cm (3.92 cm²). In all other cases, the marking should cover at least 6% of the surface area on which it is placed, while the maximum required size should be 3 cm × 6 cm (18 cm²). The marking should be composed of two equal-sized red and blue boxes, which are placed next to each other, and a rectangular black box containing the information text 'PLASTIC IN FILTER' placed below the two equal-sized boxes.
3. Design of the marking: the information text on the marking should be written in the official language or languages of the Member State where the products are put on the market and should be all in capital letters.

Expected impacts of the SUP Directive

The SUP directive is expected to have a significant impact on the environment, the economy and society.

Environmental impact

The reduction in marine plastic littering rates represents the main environmental benefit brought about by this Directive, as tobacco product filters are the second most littered SUP on the beaches in Europe. This refers to the absolute reduction in plastics entering the marine environment, including a significant reduction in SUPs, which leads to changes in production and enhanced waste prevention^{7,10}. Given that tobacco product filters containing plastic are the second

most littered single-use plastic items on beaches in the EU, the environmental benefit of the implementation of the SUP Directive is huge.

Economic impact

Since they are primarily harmed by a significant decrease in consumer demand, SUP item manufacturers are the primary participant in the assessment of the economic effects of the SUP Directive. As the measures pertaining to tobacco product filters primarily seek to reduce marine litter and change consumer behavior by promoting awareness, they are not related to a reduction in consumption rates (the measures that affect consumption the most are product bans and reduction targets)⁷. Although not affecting consumption, the extended producer responsibility schemes, requiring that the costs of cleanup are paid so as to reduce marine litter, entail a change in waste management costs, when the items become waste, including collection, recycling, mixed waste treatment/disposal and litter collections. Information costs (any costs related to running information campaigns) will be impacted by awareness-raising efforts, and business compliance costs (for complying, for instance, with the requirement to provide annual data returns on the number of items sold on an annual basis) will also rise.

Social impact

In terms of social impact, the implementation of the SUP Directive will increase social welfare, mainly through the reduction of marine and beach litter.

CONCLUSION

Given that the environmental benefits of the SUP Directive far outweigh the total losses in sales to producers, it is believed to have the potential to achieve ambitious environmental results, ensure public acceptance, and promote wider resource efficiency. The SUP Directive must be expanded upon by Member States by implementing more ambitious and practical measures during the transposition phase, such as encouraged enforcement and monitoring of measures, internal shorter deadlines for their implementation, and establishment of procedures to familiarize key players with certain measures, such as Extended Producer Responsibility measures.

Regarding the plastic contained in tobacco filters and filters marketed for use in combination with tobacco products, the implementation of the SUP Directive in conjunction with the Tobacco Products Directive (TPD) offers a unique opportunity to inform consumers both on the impact of tobacco product composition^{11,12}, but also on its environmental impact, with a view to bridging the knowledge gap associated with tobacco control policies in the sphere of EU public health.

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CONFLICTS OF INTEREST

The authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none was reported.

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DATA AVAILABILITY

Data sharing is not applicable to this article as no new data were created.

PROVENANCE AND PEER REVIEW

Commissioned; internally peer reviewed.