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DIALOGUE ON PLASTICS POLLUTION AND ENVIRONMENTALLY SUSTAINABLE PLASTICS TRADE

FACTUAL REPORT OF THE TRADE-RELATED PLASTICS MEASURES (TRPMS) SURVEY

1. In furthering the objectives of their 2021 Ministerial Statement¹, the Dialogue on Plastics Pollution and Environmentally Sustainable Plastics Trade (Dialogue) launched a survey on Trade-related Plastic Measures (TrPMs) in June 2022.² The voluntary survey was intended to complement data already available on the topic in the WTO Environmental Database ([EDB](#)), improve the collective knowledge on the subject, map existing and upcoming policies, and identify gaps and potential opportunities for enhanced collaboration.³
2. It outlined nine questions (providing some guiding options), regarding: (i) title and description of the policy or measure; (ii) the type of measures covered; (iii) the main objective of the policy; (iv) stage of the life cycle or value chain that the policy was intended for; (v) products and services covered; (vi) relevant HS/ICS codes; (vii) date of entry into force; (viii) challenges identified in the implementation phase; (ix) mechanisms to assess the measure's efficacy and/or efficiency. The survey was subsequently made available in an online format and all Members were invited to actively participate and share their insights.
3. Preliminary results and insights were presented and discussed at several meetings of the Dialogue since its launch. This report provides a factual overview of the responses and insights gained from the TrPMs survey exercise. It focuses on the harmonized categories contained in the survey, as well as further information that could be extracted from the data.

¹ See [Ministerial Statement on Plastic Pollution and Environmentally Sustainable Plastics Trade \(WT/MIN\(21\)/8/Rev.2\)](#), 10 December 2021. Current co-sponsors are: Albania; Angola; Australia; Austria; Barbados; Belgium; Bolivia, Plurinational State of; Bulgaria; Cabo Verde; Cambodia; Cameroon; Canada; Central African Republic; Chad; Chile; China; Colombia; Costa Rica; Croatia; Cyprus; Czech Republic; Denmark; Ecuador; Estonia; European Union; Fiji; Finland; France; Gambia; Germany; Greece; Honduras; Hong Kong, China; Hungary; Iceland; Ireland; Italy; Jamaica; Japan; Kazakhstan; Korea, Republic of; Latvia; Lithuania; Luxembourg; Macao, China; Maldives; Malta; Mauritius; Mexico; Morocco; Netherlands; New Zealand; Norway; Panama; Paraguay; Peru; Philippines; Poland; Portugal; Romania; Russian Federation; Samoa; Saudi Arabia, Kingdom of; Singapore; Slovak Republic; Slovenia; Spain; Suriname; Sweden; Switzerland; Thailand; Tonga; United Kingdom; United States; Uruguay; and Vanuatu.

² [INF/TE/IDP/W/7/Rev.1](#), "Questions for a Proposed Survey on Trade-related Measures on Plastics Pollution".

³ See Informal Summary by the Coordinators on the Plenary Meeting held on 24 May 2022 ([INF/TE/IDP/R/6](#)).

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1. METHODOLOGY

4. The survey began collecting responses in July 2022 and continued until August 31, 2023. The voluntary survey was open to all Members, available also in digital format and in the three official languages of the WTO (English, French and Spanish). Before the launch of the survey, discussions at Dialogue meetings on Trade-related Plastic Measures (TrPMs) had already started to take place⁴ based on the data available in the WTO's Environmental Database (EDB).⁵ Data on individual TrPMs notified by Members were thus also collected from the EDB and inputted into the survey format whenever sufficient information was available.⁶ Whenever possible, duplicates of the same measure notified more than once (e.g. because included in notifications done in subsequent years) were excluded, capturing information from the most recent notification available. TrPMs captured from the EDB were also streamlined and/or deleted when contrasted to direct responses to the survey provided by Members. The **full survey dataset** now contains detailed information on **223 TrPMs**.

2. OVERVIEW OF MAIN RESULTS

2.1 General information

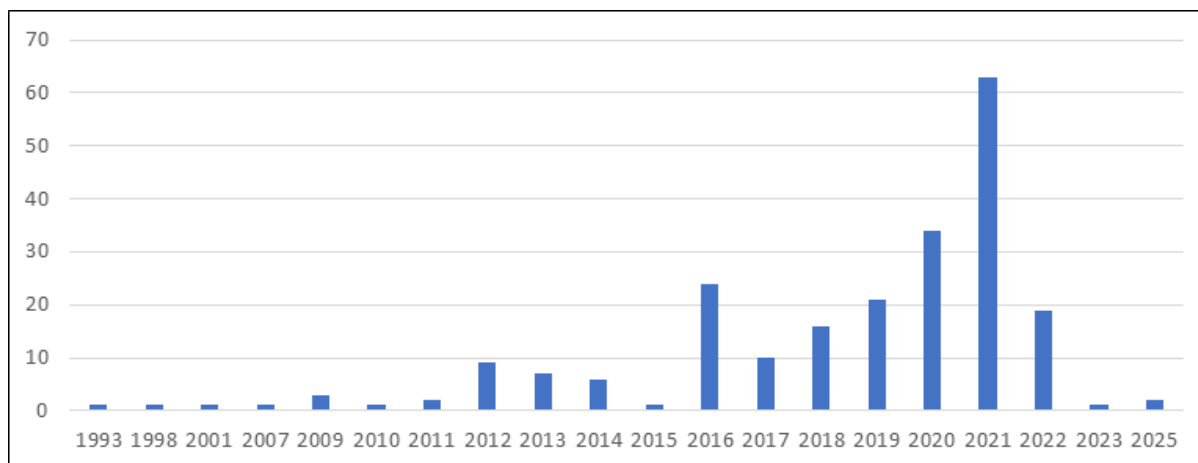
5. Graph 1 depicts the total number of TrPMs for each year from 1993 to 2025.⁷ As can be seen, there has been a steady and important increase in TrPMs from 2016 onwards, with 75% of all TrPMs in the dataset concentrated between 2016-2021, and more than half represented in the three years between 2019 and 2021. It is important to recall that EDB data is only currently available for notifications made to the WTO between 2009 and 2021, which largely explains the drop in total number of TrPMs captured in the dataset after that period. The exponential growth in TrPMs in recent years (much greater than the growth trend for all environmental objectives combined captured by WTO data) clearly mirrors the increase in interest and concerns related to plastic pollution.

⁴ See, *inter alia*, the following Dialogue documents: Factual Report (2021) ([INF/TE/IDP/W/3](#)); Factual Summary of Discussions on Sustainable and Effective Alternatives and Substitutes ([INF/TE/IDP/RD/88/Rev.1](#)); and Factual Summary of Discussions on Reduction and Circularity to Tackle Plastic Pollution ([INF/TE/IDP/RD/125](#)).

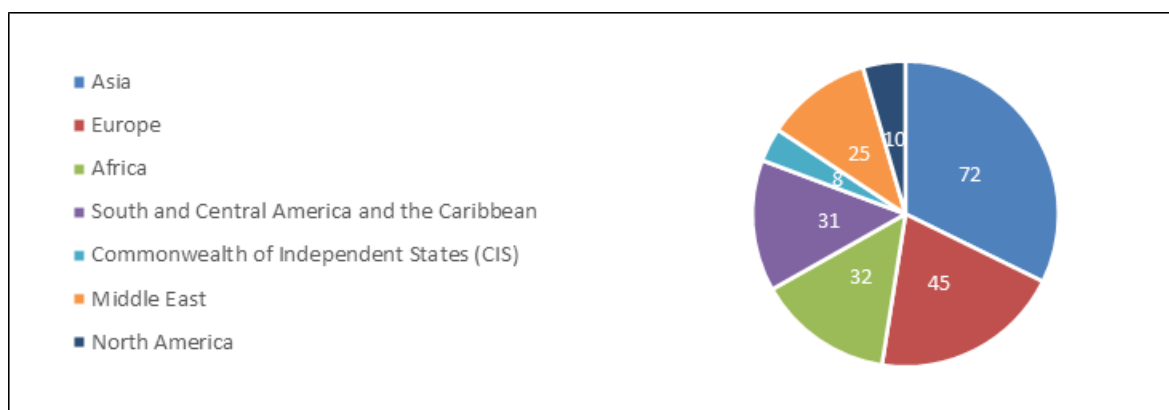
⁵ The EDB contains all environment-related notifications submitted by all WTO Members in a given year as well as environmental measures and policies mentioned in the Trade Policy Reviews of WTO Members. Data in the EDB is available for notifications made between 2009-2021. At the time this analysis was finalized, the WTO Secretariat was working on publishing the annual data for 2022.

⁶ For instance, due to the nature of WTO transparency obligations, very few notifications contained information relevant to questions in the survey focused on challenges in implementation or mechanisms to assess the measure's efficacy and/or efficiency. In that sense, information described in this Report related to those topics were almost exclusively extracted from survey replies.

⁷ The EDB captures information from notifications made by WTO Members in a given year. Not all notifications indicate the date of entry into force of the policy, or they might refer to policies already in force or that were in force for the period in the past the notification refers to. In that sense, for the TrPMs extracted from the EDB, the year the notification was made to the WTO was considered for this analysis. Conversely, for the TrPMs collected from the survey, the year refers to the year of policy implementation indicated by the replying delegation.

Graph 1. Number of TrPMs per Year

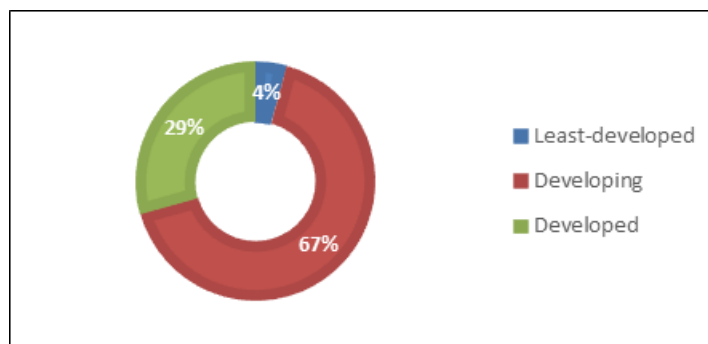
6. The 223 TrPMs in the dataset come from 85 different WTO Members.⁸ These measures come from all regional groupings, with a significant concentration of TrPMs in Asia (72), followed by Europe (45), Africa (32), and South and Central America and the Caribbean (31) (see graph 2 below). In terms of Members with at least one TrPM, the dataset shows that 34 are from Europe, followed by Asia (15 Members), Africa (12) and South and Central America and the Caribbean (12).

Graph 2. TrPMs by Region

7. The majority of the TrPMs, 71%, come from developing Members (67%) and least developed countries (LDCs) Members (4%), whereas 29% come from developed Members (see graph 3). This reflects the particular importance that developing and LDC Members accord to using trade-related measures to address this specific environment-related challenge. For comparison, general EDB data shows that for all environment-related objectives combined (almost 17,000 measures), about 50% are measures notified by developing and LDC Members.⁹

⁸ Considering the European Union (EU) as 27 Members.

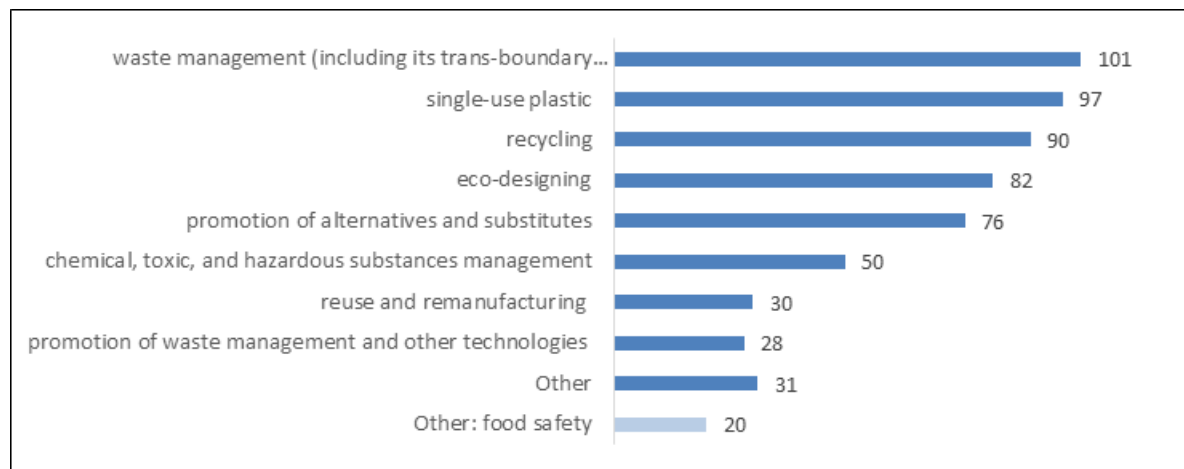
⁹ It is worth noting that this assessment holds true even when comparing only the TrPMs extracted from the EDB data, for which 74% of the measures come from developing and LDC Members.

Graph 3. Development status by number of TrPMs (Percentage)

2.2 Types of objectives

8. The most common objective pursued by TrPMs, 'waste management and leakage avoidance', with 101 entries, followed by single-use plastic (96), recycling (90), eco-designing (82), promotion of alternatives and substitutes (76) and chemical, toxic and hazardous substances management (50) (see graph 4).¹⁰

9. These objectives indicate a comprehensive approach to plastic pollution through trade-related policies, encompassing sustainable production, chemicals, toxic and hazard management, recycling, waste management, among others. In effect, over 72% of TrPMs included more than one objective, with only 61 indicating a single harmonized objective, mostly targeting single-use plastics (22) and waste management (18).

Graph 4. Objective(s) pursued by TrPMs

10. Food safety had not been included among the initial set of harmonized objectives. However, due to its relative prevalence among 'other' types of objectives mentioned in the dataset, a specific category and analysis was able to be produced. Twenty TrPMs indicate such objective, almost all (19) proposing draft rules or final minimum requirements for recycled synthetic resins (mostly plastics) when intended for use in contact with food, including when obtained through chemical recycling (in at least two TrPMs). Most measures were notified or adopted in 2016 (12), with a few more concentrated in 2021 (4). Such TrPMs came from 38 WTO Members.¹¹

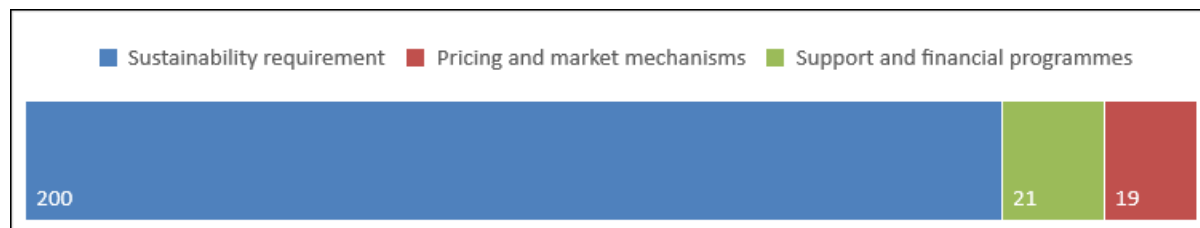
¹⁰ The harmonized types of objectives were: (i) recycling; (ii) reuse and remanufacturing; (iii) eco-designing; (iv) single-use plastic; (v) waste management (including its trans-boundary movement) and leakage avoidance; (vi) promotion of alternatives and substitutes; (vii) chemical, toxic, and hazardous substances management; (viii) promotion of waste management and other technologies (ix) Other. Each measure could pursue more than one of the set objectives at the same time and delegations could also indicate other types of objectives not covered by the original harmonized categories.

¹¹ The EU counting as 27 Members.

2.3 Types of TrPMs

11. The survey captured information on three broad categories of TrPMs: sustainability requirements; pricing and market mechanisms; and support and financial programmes. These broadly capture the main types of trade-related policies adopted for environmental purposes and notified or discussed at the WTO. Graph 5 shows the distribution of TrPMs based on these categories.

Graph 5. Broad categories of measures contained in the policies in the dataset¹²



12. The survey data shows that most policies include 'sustainability requirements', with 200 entries representing 83% of the dataset, followed by 'support and financial programs' with 21 entries (9%) 'pricing and market-based mechanisms' with 19 entries (8%).

13. This could be at least partially explained by the relative reliance of the dataset on formal WTO notifications contained in the EDB. WTO agreements contain varied transparency obligations which require WTO Members to notify their trade-related measures following different requirements and periodicities. Certain types of measures, of which many 'pricing and market mechanisms', do not necessarily need to be notified in the same manner as others, such as regulations. Indeed, out of the 19 'pricing and market mechanisms' contained in the survey dataset, 16 came from direct replies to the survey by delegations. This reinforces the value of the survey exercise, not least to shed light and offer opportunities for cooperation on trade-related measures for which traditional WTO data is scarcer.

14. On the other hand, the smaller number of 'support and financial programmes' applied to objectives related to addressing plastic pollution available in the dataset seems to contrast with the general prevalence of such category among the total number of trade-related measures adopted for all environmental objectives combined available in the WTO EDB. In the EDB, 'sustainability requirements' represent 60% of the universe of measures in the dataset, while 'support and financial programmes' represent roughly 38%; a four times greater relative importance than for TrPMs. Said otherwise, for all environmental objectives, WTO Members seem to rely on 'support and financial programmes' (covered by WTO transparency obligations) more often than for addressing plastic pollution. While it is difficult to properly determine why this seems to be the case (in particular given the relatively small data sample), it could be linked to the relative recency of plastic pollution as an objective targeted by trade-related measures.

2.3.1 Harmonized types of measures

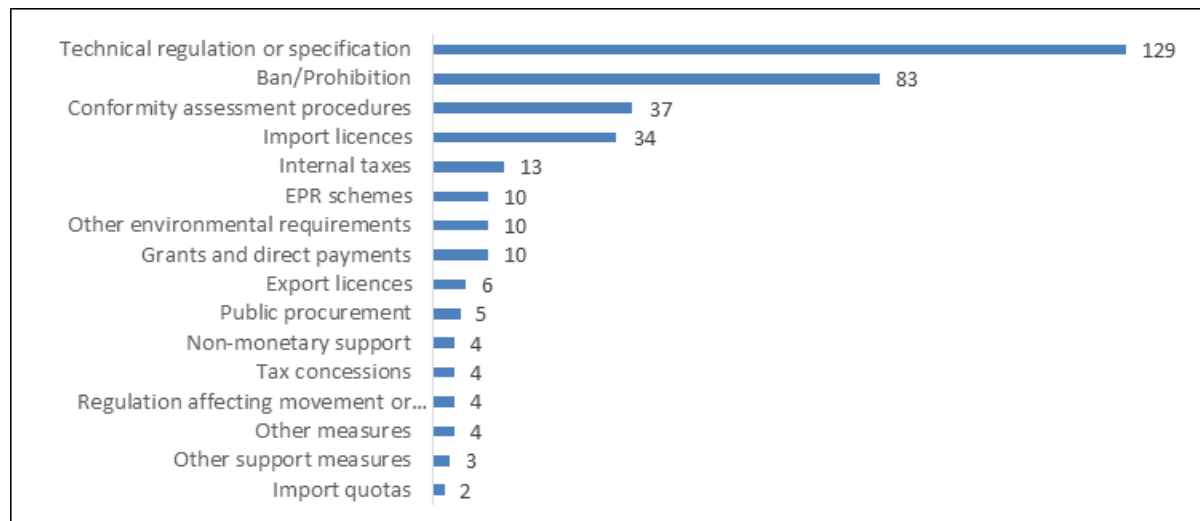
15. The three broad categories can be sub-divided into more specific types of measures. To provide more granularity to the report, the TrPMs survey dataset was further categorized based on the harmonized types of measures long used for the EDB.¹³ To those, the specific type 'Extended

¹² Most of the time, all elements of a policy will fit into one single category. Whenever a policy had clearly distinct features, they were divided into different individual TrPMs in the dataset. However, some policies were difficult to subdivide and had features of more than one category. In such cases, more than one category was assigned and thus the total count of such categories is slightly larger than the total number of TrPMs.

¹³ The harmonized categories are: Technical regulation or specifications; Conformity assessment procedures; Ban/Prohibition; Risk assessment; Quarantine requirements; Regulation affecting movement or transit; Import licences; Export licences; Intellectual property measures; Other environmental requirements; Countervailing measure / investigation; Anti-dumping measure / investigation; Safeguard measure / investigation; Import quotas; Export quotas; Import tariffs; Export tariffs; Internal taxes; Non-specified price and market-based measure; Other price and market-based measures; Grants and direct payments; Tax concessions; Loans and financing; Income or price support; Non-monetary support; Public procurement; Other support measures; Other measures.

Producer Responsibility (EPR) scheme' was added given the relevance of the measure to the topic. Each TrPM can (and often does) include more than one element fitting a harmonized type and thus the total count exceeds the total number of TrPMs. Graph 6 provides the breakdown of TrPMs based on such categories.

Graph 6. Harmonized type of measures (counts)



2.3.1.1 Technical regulations or specifications and conformity assessment procedures

16. As can be noted, a wide variety of trade-related policies have been used to address plastic pollution, chief among them 'technical regulations or specifications', present in 58% of all TrPMs in the dataset. These usually take the form of technical requirements on plastic products to be put on the market, produced and/or exported to minimize the risk of leakage and pollution, ensure quality and (food / health) safety, facilitate collection, recycling and reuse or promote alternatives and substitutes. It is the type of measure used for the widest variety of plastic-related objectives, with at least 10 measures for each of the harmonized objectives captured by the survey. These measures also seem to be used more often for the objectives of eco-designing (pursued by 60 TrPMs with such tools or about 50% of the total) and promotion of alternatives and substitutes (49, 38%), than the prevalence of such objectives in all types of measures combined (graph 4 above). Additionally, all TrPMs addressing food safety include technical regulations or specifications among their tools.

17. Conformity assessment procedures (CAPs) are used to determine whether products fulfil the requirements established by relevant technical regulations or standards. They are the third type of measure most often identified in the dataset, present in 37 TrPMs. Not surprisingly they are most often found in TrPMs also containing technical regulations or specifications and the breakdown of the objectives they pursue is also similar. However, the important difference between the total number of CAPs and technical specifications could give rise to questions about challenges on implementation or at least about access to information on certification procedures. While this does not seem to be an issue restricted to measures addressing plastics (for all objectives combined in the EDB, there are 2.9 times more technical specifications than CAPs), the discrepancy seems to be relatively more prevalent for TrPMs (3.5 times more specifications than CAPs).

2.3.1.2 Bans or prohibitions

18. Bans or prohibitions are the second most often used type of measures in the dataset, present in 37% of the survey TrPMs. The 83 bans/prohibitions similarly seek a wide variety of objectives but with a strong concentration on addressing single-use plastics (52 TrPMs, or 63% of bans). Indeed, as will be explored further below, bans on single-use plastics (often coupled with exceptions for certain medical goods or those certifiably degradable and/or compostable), seem to be the main trade-related policy tool in the dataset used to address the issue of single-use plastics, followed by technical regulations or specifications (included in 49 TrPMs addressing single-use

plastics, often combined with a ban), internal taxes and EPR schemes (13), import licences (10), support measures (9) such as grants, tax concessions and government procurement.

19. Other notable harmonized objectives pursued by the bans or prohibitions contained in the dataset are waste management (including its trans-boundary movement) and leakage avoidance (34 TrPMs) and chemical, toxic, and hazardous substances management (24 TrPMs). For the latter, bans or prohibitions (often coupled with some exceptions) are also the tool most often found in TrPMs addressing the issue.

2.3.1.3 Import and export licences

20. Import licences are the fourth most often used type of measures in the dataset, present in roughly 15% of the survey TrPMs. The 34 import licensing schemes are mostly applied for the objective of waste management (including its trans-boundary movement) and leakage avoidance (24 TrPMs). Export licences are scarcer in the dataset, with only seven explicit examples, often used in combination with import licences.¹⁴ Not surprisingly, many import and export licensing schemes in the survey refer to the implementation of international obligations under the Basel, Rotterdam and Stockholm (BRS) conventions and other international instruments.

21. Some import licences (13) are also introduced to help address single-use plastics, including to manage their end of life and avoid their leakage. One such TrPMs submits components of plastic bags to the import licensing system to "better control the unlawful production of banned plastic bags and to ensure the traceability of components of plastic bags and avoid any risk of misuse". The components include: semi-finished goods (flattened sheaths of printed and unprinted film of polyethylene in rolls of a width not exceeding 300 cm); polyethylene (PE) waste; and other materials that may contain PE. Some are also applied in conjunction with conditional bans, technical specifications or internal taxes and/or EPR schemes to facilitate their implementation.

2.3.1.4 Internal taxes and EPR schemes

22. Internal taxes (present in 13 TrPMs) are most often found in the survey in TrPMs seeking to address single-use plastics (10) and/or fund and promote recycling (10), alternatives and substitutes (9), eco-designing (7) and reuse (4), almost always combining at least three of these objectives through this single pricing mechanism. Such internal taxes apply to a wide range of plastic products, including packaging (7), waste (5), cups, bottles and bags (4 each) and tableware (3). Some include a specific obligation for supermarkets and other consumer-facing businesses to charge when providing single-use plastic goods (e.g. bags). Others refer to reimbursable deposit fees or credit systems for plastic packaging and single-use plastic goods (e.g. bottles). Some condition the application of tax on the appropriate disposal of the good or on the use of a minimum % of recycled or secondary material content.

23. EPR schemes is another type of measure in the database always associated with TrPMs seeking to realize multiple objectives at once (at least three). Not surprisingly, all 10 EPR schemes found in the survey include the objective of waste management and leakage avoidance. However, they also seek to promote recycling (9), reuse (5) and eco-designing (5). They apply to a similar range of goods than internal taxes and are often complex schemes, developed with and imposing obligations and specific targets on the domestic industry, retailers and importers, including on ecodesign elements, recovery and recycling targets, and transitions to reuse schemes. Some refer to the option of voluntary and/or industry-developed and product-specific schemes, establishing broad targets to be met. Some stress public participation as part of the development and implementation processes. Most EPRs in the survey were slated to enter into force from 2021 onwards, with the last implementation year of 2025.

2.3.1.5 Support measures

24. The final group of measures most often found in the survey are the following support measures: grants and direct payments (found in 10 TrPMs); preference in public procurement (5); tax concessions (4); non-monetary (4) and other support (3) measures, such as public advisory services and research and development, governmental certification or recognition labels, education

¹⁴ As will be explored below, many measures might be applicable also to imports and/or exports but the way they are drafted or notified do not explicitly indicate it.

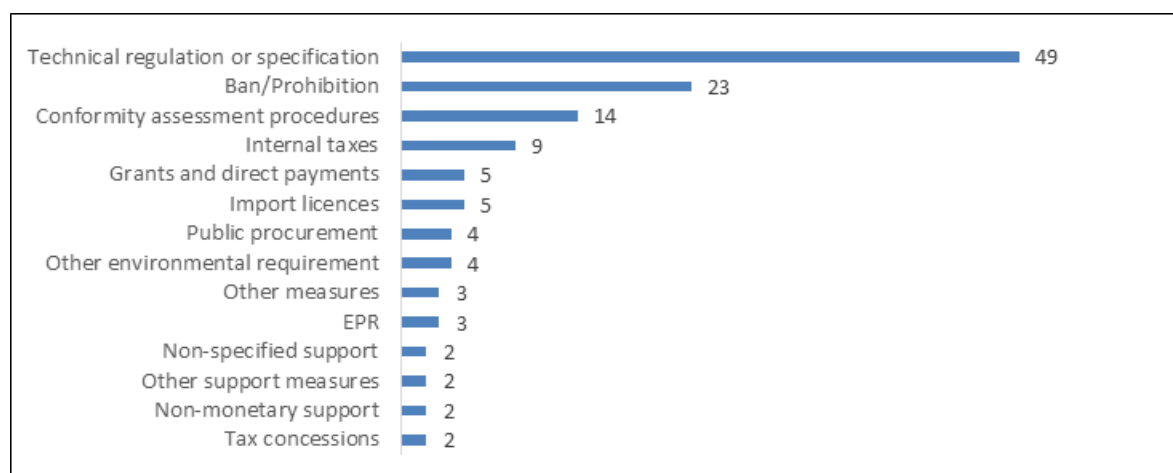
campaigns and provision of collection and waste management infrastructure. Sometimes used in combination, these 21 individuals TrPMs seek to achieve all harmonized objectives covered by the survey, with a strong prevalence of support measures seeking to promote downstream waste management, leakage avoidance and/or recycling (objectives reflected in 16 out of the 21 TrPMs). At the same time, these often-broad support programmes were also used to promote the development of new technologies (11 TrPMs) and alternatives and substitutes to plastics (11), often specifically targeting the single-use plastics issue (9) and/or promoting reuse models (7). Indeed, considering the smaller incidence of these measures in the survey, they seem to be particularly associated with the objectives of promoting new technologies and alternatives or substitutes to plastics (see further below).

25. Grants and direct payments are often included in TrPMs seeking to fund waste management projects such as waste-to-energy or waste-to-fuel facilities and other resource utilization schemes, or specific plastic goods recycling, such as packaging and agricultural films. Some explicitly mention the funding of research and development of new sustainable technologies, alternatives, and substitutes, including through innovation grants and competitions. Public procurement schemes include either mandatory or preferential requirements for sustainable alternatives and substitutes to certain plastic products (e.g. aluminium bottles), reusable packaging, or a minimum content of recycled plastics. Tax concessions in the survey are also used to provide preferential tax treatment to sustainable or "preferable" goods, such as those produced with recycled plastic content, integrated resource utilization of plastic wastes or those necessary for recycling activities (e.g. acquisition of recycling machinery). A variety of internal taxes for rebate/exemption have been mentioned including: value-added tax; income tax; environmental taxes on specific products (packaging or waste fee/levies); specific industry/sectoral contributions, including to EPR schemes.

2.3.2 Types of measures used for 'promotion'

26. A key part of the Dialogue has focused on the issue of "promotion".¹⁵ As seen above, the survey also captures TrPMs adopted for the objectives of 'promotion of alternatives and substitutes' (76 TrPMs) and of 'waste management and other technologies' (28). As can be seen in graph 7 below, with regards to promotion of alternatives and substitutes, technical regulation or specifications are also the most often types of measures identified in the survey for this objective (49), followed by bans and prohibitions (23) and CAPs (14). While this breakdown reflects the same relative importance of these measures for all objectives, it is worth noticing that those adopting/notifying trade-restrictive measures seem to be well-aware of the need to develop alternative and/or substitute goods, services and (reuse) business models to replace those being restricted when necessary.

Graph 7. Types of measures in TrPMs seeking promotion of alternatives and substitutes



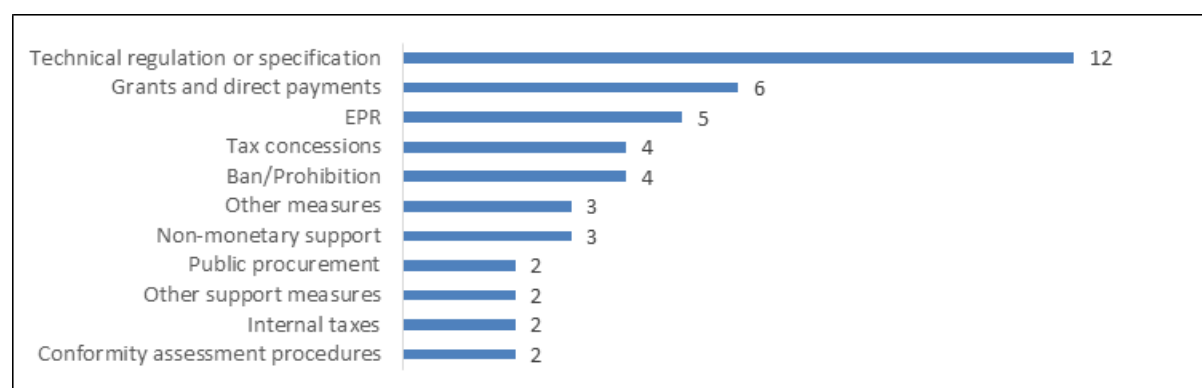
27. As already mentioned, the group of 'support measures' (grants, public procurement, tax concessions etc.) has a particularly high relative incidence for this objective, indicating the relative

¹⁵ See Dialogue 2022 Plan ([INF/TE/IDP/W/5](#)) and the Factual Summary of Discussions on Promotion ([INF/TE/IDP/RD/88/Rev.1](#)).

importance of these types of measures for promoting substitutes and alternatives. Also worthy of note, of the total 13 internal tax measures identified in the survey, nine include the promotion of substitutes and alternatives among their objectives, once again arguably indicating the realization by trade policy makers of the potential for this pricing tool to shift market preferences towards more sustainable goods.

28. With regards to the 28 TrPMs which include the objective of 'promotion of waste management and other technologies', the breakdown of types of measures follows a similar pattern (see graph 8), with 12 containing technical requirements and specifications, followed by grants and direct payments (6), EPR schemes (5) and tax concessions (4). Not surprisingly, in this case, the relative prevalence of support measures is even more pronounced.

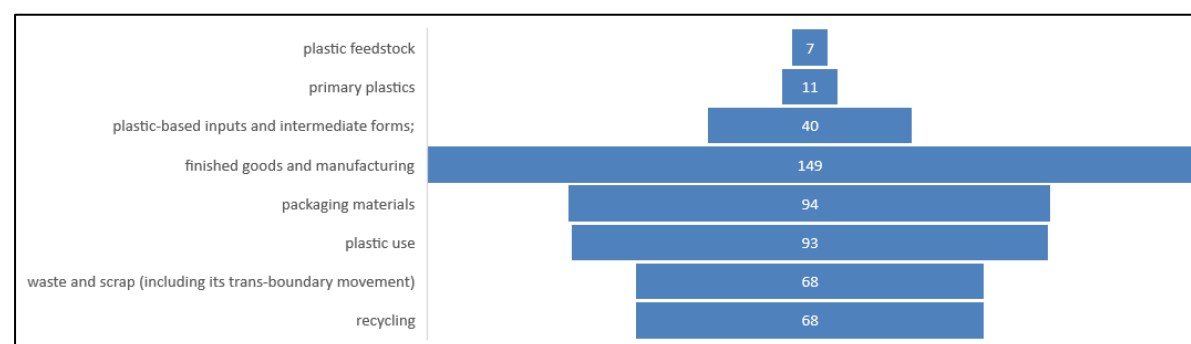
Graph 8. Types of measures in TrPMs seeking promotion of waste management and other technologies



2.4 Stage in life cycle and value chain

29. The survey captured information about the stage in the productive value chain and life cycle of plastic and other products targeted by the TrPMs.¹⁶ As can be seen in graph 9, most TrPMs in the survey target mid-stream stages, with 149 targeting finished goods and manufacturing, followed by packaging materials (94), plastic use (93), waste and scrap (68) and recycling (68).

Graph 9. Stage in value chain life-cycle



30. While there is a clear concentration of measures in mid to downstream stages, the higher incidence mid-stream indicates how the TrPMs in the survey seem to be acting mostly during the plastic production and consumption phases (*i.e.* before it becomes waste or is collected for recycling). A deeper analysis of the TrPMs targeting upstream stages offers some further insights.

¹⁶ The stages were: plastic feedstock; primary plastics; plastic-based inputs and intermediate forms; finished goods and manufacturing; packaging materials; plastic use; waste and scrap (including its trans-boundary movement); recycling.

2.4.1 TrPMs targeting "upstream" stages

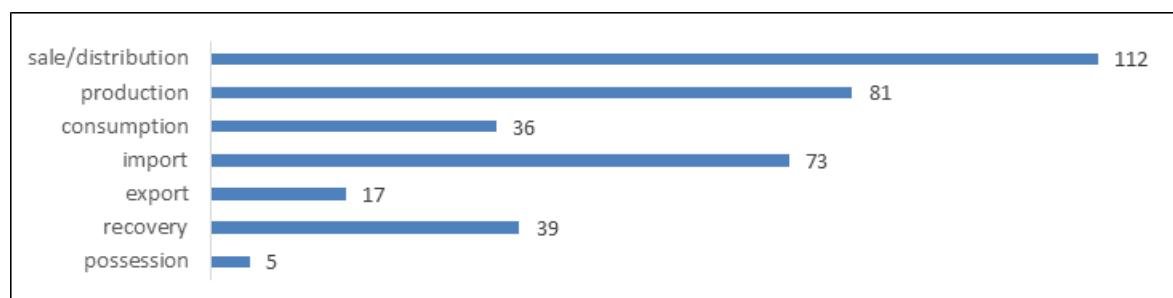
31. The 41 TrPMs targeting 'plastic-based inputs and intermediate forms' seem to follow one of five general approaches: i) targeting components and inputs of plastic products for which production/consumption is also restricted to facilitate compliance; ii) restricting the use/importation of microplastics and microbeads intentionally added to cosmetics and other products; iii) regulating plastic parts and intermediate products used in the construction, transport and other sectors (e.g. toys); iv) restricting certain plasticizers, chemicals and/or additives that are hazardous or that might negatively affect plastic degradability, composability and/or recyclability; or v) regulating secondary raw material / recycled inputs for use in new products, e.g. to prevent the use of discarded medical waste (see below for further information on TrPMs targeting microplastics, additives, secondary materials and other goods).

32. The 11 TrPMs targeting primary plastics and the seven targeting feedstocks follow similar approaches, but target polymers and resins themselves, sometimes specifying which (e.g. polyketone synthetic resin, polyethylene, polyethylene terephthalate, polyolefins, polystyrene, 'coloured primary plastics'), as well as feedstocks used (e.g. 'bio-sourced' or petroleum-based). Other times, these measures only refer to the issue of primary plastics (or simply 'polymers [in primary form]') and pollution in general terms.

2.4.2 Type of activities targeted

33. The survey also allowed for the TrPMs to be categorized based on the specific activities to which the measures apply. These activities included imports, exports, production, consumption, sale/distribution, possession, and recovery.¹⁷ One TrPM can be applicable to more than one activity and thus the total count of activities targeted is higher than the total number of TrPMs. Graph 10 shows the distribution of the activities that the measures are applicable to.

Graph 10. Activities Targeted



34. This categorization allows to explore situations in which there might be potential gaps (at least based on the measures descriptions captured by the survey) in the applicability of certain restrictions. About 65% of all TrPMs (145) apply to sale/distribution, consumption and/or possession. This means that the targeted plastic and other goods are either banned or restricted from being placed in the internal market. Seventy-two TrPMs apply to sale/distribution and/or consumption/possession while simultaneously applying at least to production and/or export as well. In practice this means that the restricted goods cannot be put into the internal market (without following the requirements) nor exported from it.

35. There are however 103 TrPMs that apply only to imports, consumption and/or sale and distribution, but not to export and/or production. This implies that while these goods or substances may be subject to restrictions within the domestic market, they could still be produced and exported (sometimes referred to as "export of domestically restricted/prohibited goods"). It is important to note that, due to their regulatory nature, technical regulations or specifications notified to the Committee on Technical Barriers to Trade (TBT) often do not explicitly refer to production or exports (and would thus be classified as applying "only" to 'sale/distribution' in the survey) but might nonetheless be applicable to all production in a market. Still, out of these 103 TrPMs, only 56 have

¹⁷ When differentiating between 'consumption' and 'sale/distribution', the term 'consumption' is used only when explicitly mentioned in the measures, while "sale/distribution" is used in all other cases in which the TrPM's description indicates it applies to products meant to be introduced in the market. This is the case, for instance, of many technical regulations or specifications and bans/prohibitions.

been notified to the TBT Committee. The remaining TrPMs have thus a higher chance of not being applied to exports.

36. Additionally, 67 TrPMs explicitly apply only to sale/distribution and/or consumption as well as production, but not export. In theory these measures could allow for the re-export of the restricted goods from the market (e.g. through "free ports" or special economic zones). It is unclear from the survey data whether this would be the case in any of these TrPMs, but the low number of TrPMs explicitly indicating they apply to exports (17) provides an opportunity for clarifications and closing potential gaps.

37. There are 41 TrPMs that apply solely to imports, but not to sale/distribution, production, and/or consumption. This implies that while imports of certain goods or substances may be restricted, they could still be produced and put on the market, or even exported. Similarly to measures notified to the TBT Committee, those notified pursuant to the Agreement on Import Licensing Procedures (ILP) or to the Decision on notification procedures for quantitative restrictions (QR decision) could be expected to only refer to imports in their application. Out of the 41 TrPMs, 17 were notified pursuant to the ILP Agreement and 13 under the QR decision, while 11 are not related to either. Additionally, only six out of the 41 TrPMs come from small islands developing states (SIDS), with the remaining measures originating from 21 different Members. With regards to the types of goods or substances targeted, 25 are applied to wastes, while the remaining 15 are not. The 15 measures not related to waste cover a diverse range of products.

38. Thirty-nine TrPMs focus on recovery activities, mostly to impose obligations or promote recycling, avoid leakage or support clean-up programmes. Finally, 5 TrPMs explicitly restrict or even prohibit the possession of certain plastic products. These are all focused on single-use plastic products, particularly bags.

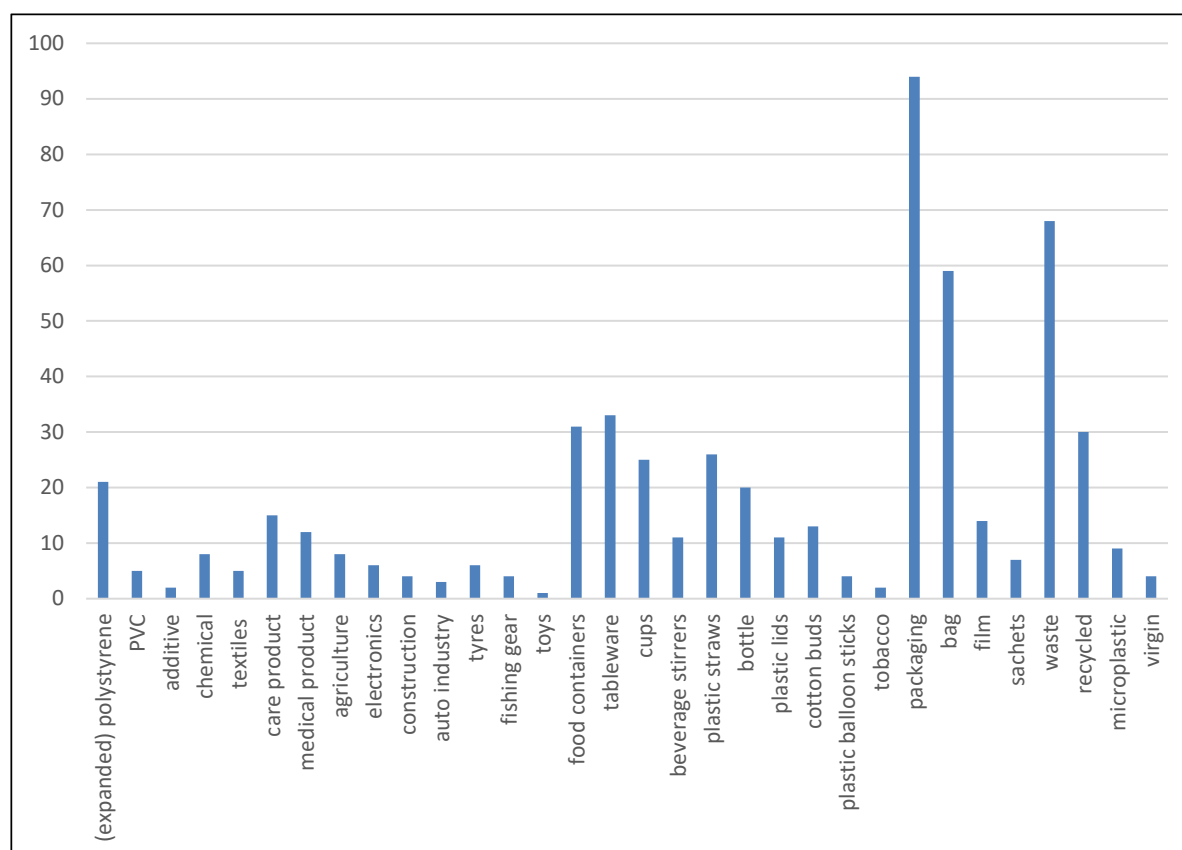
2.5 Products, Harmonized System (HS) and International Classification for Standards (ICS) codes covered by survey TrPMs

39. The survey captured what products were targeted by each TrPM, as well as their Harmonized System (HS) and/or International Classification for Standards (ICS) codes when provided. While 113 TrPMs indicated HS codes covered (anywhere from 10-digit to, more often, 2-digit levels) and 53 indicated ICS codes, the lack of granularity in harmonized identification codes for plastic products as well as a broad variation in how such codes are communicated made a detailed analysis difficult.

2.5.1 Type of products targeted by survey TrPMs

40. Nonetheless, based on the description of the products targeted by each TrPM, a general classification of those most often targeted was developed.¹⁸ Graph 11 below provides the breakdown of products targeted by the TrPMs in the survey, broadly covering six groups: specific polymers, chemicals and additives; goods from certain industries/sectors (e.g. textile, construction, fisheries); [single-use] food-related products; other [single-use] products specifically targeted; packaging; and plastics based on their life-cycle stage or form.

¹⁸ The categories included: specific polymers recurrently mentioned (polystyrene, PVC); additives; chemicals; microplastics; industry/sectors (textiles, care products, medical, agricultural, electronics, construction, auto industry goods); tyres; fishing gear; toys; [single-use] food-related products (food containers, tableware, cups, beverage containers, plastic straws, bottles, plastic lids); other [single-use] products (cotton buds, plastic ballot sticks, tobacco, bags, film, sachets); packaging; waste; virgin and recycled plastics.

Graph 11. Harmonized types of products most often targeted by TrPMs

2.5.2 Single-use plastic products

41. As can be noted, TrPMs in the survey target a range of products, most often of which are packaging (94), waste (68), and plastic bags (59). Next a range of products from the food and food services industry are targeted, often specifying their single-use nature: tableware (33), food containers (31), plastic straws (26) and cups (25). Given the prevalence of the objective of addressing single-use plastic and other single-use goods in the TrPMs found in the survey (97 TrPMs), the table 1 below was compiled with all such products and their incidence in the survey.

Table 1. Single-use products most often targeted (number of TrPMs)

Bag	59
Tableware	33
Food containers	31
Plastic straws	26
Cups	25
Bottle	20
Film	14
Cotton buds	13
Beverage stirrers	11
Plastic lids	11
Sachets	7
Plastic balloon sticks	4
Tobacco	2

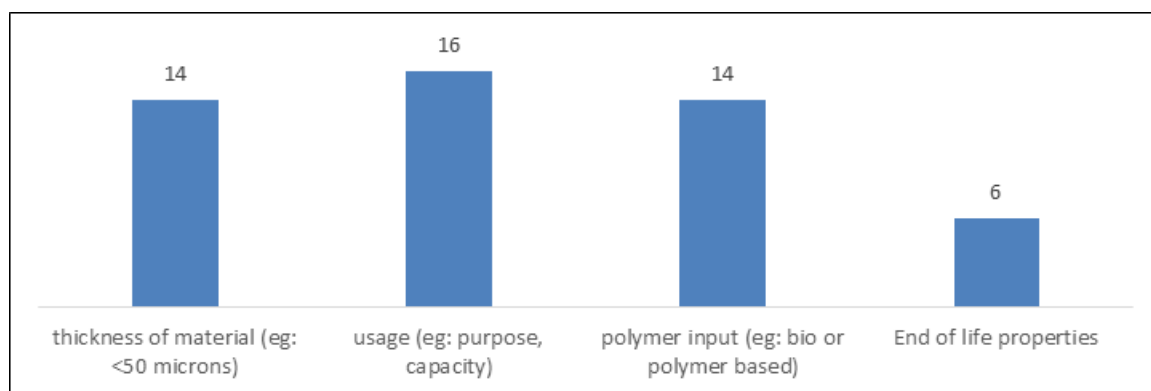
2.5.2.1 Identification of Single-Use Plastic Bags

42. As can be gleaned from table 1, plastic bags are the single-use products most often targeted by TrPMs in the survey. These 59 TrPMs come from 64 Members and are almost entirely composed of bans, import licensing schemes and technical regulations or specifications coupled with certain exceptions for bio-sourced / recyclable / compostable / degradable materials, medical/health reasons (see further information below) or due to economic, social and/or cultural justifications (e.g. because there are no [affordable] available substitutes in the market, or for those needed to avoid food waste or ensure food safety of raw products).

43. Based on the data available in the survey for these measures, it was also possible to analyse how these TrPMs were identifying the [single-use] [plastic] bags being targeted.¹⁹ In total, 30 TrPMs offered enough information for the analysis (either in the data directly available or through the link to additional legal texts/information provided). These measures indicate a wide variation in definitions, specifications and requirements used, following broadly four criteria to identify the targeted bag: i) the thickness of the material (e.g. < 50 microns); ii) to the usage of the bag (e.g. purpose or capacity); iii) the polymer input used (bio or polymer-based); and iv) end-of-life properties of the bag (e.g. degradability).

44. All 30 TrPMs used at least of one these criteria, while 16 used two or more. None used all four. As can be seen in graph 12, most TrPMs (16) include references to "usage" when defining the targeted bag. Fourteen refer to the thickness of the material, while the same number of TrPMs rely on the type of polymer used (either as the sole criteria or with other). Finally, 6 TrPMs make reference to the end-of-life properties of the product to restrict/regulate the bag (e.g. its biodegradability, recyclability or compostability).

Graph 12. Criteria used to identify single-use plastic bags in TrPMs



45. While this indicates an important variability in the general criteria used to identify the targeted bags, the survey also indicated significant differences even when TrPMs used the same criteria. For instance, when targeting bags based on the thickness of the material used, TrPMs used a variety of classifications (e.g. light[weight], [very] [ultra-]light, thin, ultra-thin) based on thickness rates ranging from 15 to 100 microns. Table 2 below provides the incidence of thickness rates mentioned.

Table 2. Thickness referred to in TrPMs

thickness (in microns, smaller than)	15	25	30	35	50	70	100
# of TrPMs	2	2	1	2	6	3	1

46. With respect to "usage", three general approaches were identified. First, some TrPMs will clarify they apply to certain bags when sold/delivered and "designed to carry" specific goods

¹⁹ It should be noted that not all TrPMs expressly indicate that the bags targeted are "single-use" and/or only those made of "plastics". However, the specific definitions and criteria used by these 30 TrPMs clearly indicate the focus on disposable plastic bags.

including: i) those purchased goods from a business; ii) specific goods, materials or products (e.g. unwrapped fruits, food items, clothing; or iii) products and goods that are delivered to a consumer (e.g. in food or other delivery services). The implication is that bags sold/delivered/used for these purposes and goods are usually quickly discarded. Secondly, some TrPMs indicate the specific capacity, volume, or surface density of the targeted bag (e.g. those of a capacity of less than 10 kilograms; less than 25 liters; of surface density equal to or greater than 60 g/m²; bags that must be able to carry goods for specified amount of times or greater than certain distances [e.g. 53 meters]). Finally, a third approach identified is to indicate whether the plastic bag is designed for single-use/short useful life or to be reusable a minimum number of times (e.g. more than 100 times; multiple circuits or rotations).

47. On "polymer input", three main variations were identified. First, a group of TrPMs (9) target specific polymers or define plastics as "polymer-based materials". In this case a variety of polymers have been mentioned as part of the identification of the bag, such as "polymers of ethylene", or polymers of "one or more organic polymeric substances of large molecular weight", or polymers that contain essential ingredients including a "high polymer such as polyethylene terephthalate, high density polyethylene, Vinyl, low density polyethylene, ["non-woven"] propylene, polystyrene, PVC and nylon", *inter alia*. Secondly, some TrPMs (5) expressly refer to petroleum-based [derived from oil] material [or its derivatives] in the definition of the plastic bag, implying that they focus on oil-based bags. Finally, some TrPMs (3) include a reference or definition for "bio-based" bags, either to exempt them from the restriction or to expressly confirm they are covered by the measure.

48. Concerning "end of life", there were two main identifiable approaches. TrPMs targeting single-use bags may include references to whether the targeted goods are [bio]degradable and/or compostable, either to exempt from the restriction or to expressly confirm they are covered by the measure. Another approach is to specifically target a not fully degradable plastic (in particular "oxo-degradable" material) as part of the restriction. Table 3 below provides a summary and overview of the four criteria and their internal variations.

Table 3: Overview of criteria used by TrPMs to identify single-use plastic bags

Thickness (ranges)	Usage (e.g: purpose or capacity) includes	Polymer references	End-of-life properties include
< 15 microns	Designed to carry <ul style="list-style-type: none"> • purchased goods from a business • goods, materials or products • products and goods that are delivered to a consumer 	Bio-Based <ul style="list-style-type: none"> • a blend of materials with plant derived products 	Biodegradable or compostable <ul style="list-style-type: none"> • whose composition and/or characteristics do not allow or hinder its biodegradability
< 25 microns < 30 microns < 35 microns < 50 microns < 70 microns	Capacity / volume / surface density of <ul style="list-style-type: none"> • less than 10 kilograms, > 53 meters • less than 25 liters • equal to or greater than 60 g/m² 	Polymers of <ul style="list-style-type: none"> • ethylene • one or more organic polymeric substances of large molecular weight • contains as an essential ingredient a high polymer such as polyethylene terephthalate, high density polyethylene, ... 	Made of degradable plastic often included in the ban <ul style="list-style-type: none"> • incl. oxo-degradable, biodegradable and compostable materials • consists of polyethylene and oxo-degradable impurities
< 100 microns	Designed for single-use/short useful life or to be "reusable" or used > than: <ul style="list-style-type: none"> • 100 times 	Oil-based <ul style="list-style-type: none"> • petroleum-based material or its derivatives 	

2.5.3 Recycled plastics

49. Apart from single-use items, the survey data also offers interesting insights on other categories of products often targeted by TrPMs. First, 30 TrPMs from 46 Members²⁰ target recycled plastics either as secondary materials themselves or when meant to be used as input for finished goods. A good number of these TrPMs (17) aim at ensuring food safety or protecting the health of consumers of recycled plastic-based products by adopting standards and/or imposing requirements on the secondary material itself when used for certain goods (e.g. food packaging). One TrPM proscribes the use of medical plastic wastes as secondary raw material; another restricts certain [recycled] plastics wastes/products that might negatively affect plastic recyclability.

50. Furthermore, many measures (16) either promote or prescribe minimum targets and requirements for recycled content in certain plastic goods. Although most do not provide details on the specific requirements (several simply refer to promoting/requiring recycled content), those that do show an important variation in: specific products covered ([plastic] [beverage] [PET] bottles, packaging, stationary, products from polyolefins); targets (5-30% minimum content, or % of increase in recycled content [e.g. 40% increase]); sourcing (e.g. collected [and recycled] domestically); and time frames for implementation (from 2022 to 2040). As more markets implement requirements or promote recycled content, there could be an important opportunity for further transparency and potential cooperation on the topic.

2.5.4 Specific polymers

51. Many measures also target polymers (56), chemicals (8) and additives (2). While the TrPMs do not offer sufficient granularity to identify specific chemicals and additives that have been most often targeted, a couple of specific polymers have been specifically targeted relatively recurrently: polystyrene (21) and polyvinyl chloride, or PVC (5). For polystyrene, nine of the 21 TrPMs specifically targeted 'expanded polystyrene' as a plastic of concern. Forty-two Members have TrPMs in the survey which target specific polymers, chemicals and/or additives.

2.5.5 Care products, microplastics and exempted medical products

52. With regards to specific industries, 15 TrPMs in the survey target care products, such as toiletries and cosmetics. Six TrPMs restrict the intentional addition of plastic "microbeads" in [rinse-off / exfoliating / cleaning / polishing] cosmetics / personal care / hygiene products and toiletries (e.g. body wash, facial and skin cleansers, scrub, shampoo, toothpastes).²¹ Three TrPMs provide definitions of microplastic/microbeads as being solid particles of 5 mm in size [in any dimension]. The other TrPMs targeting specific products from the care and personal health industry aim at single-use products such as disposable diapers, absorbents and sanitary napkins, or hazardous chemicals/additives of restricted use in care products packaging.

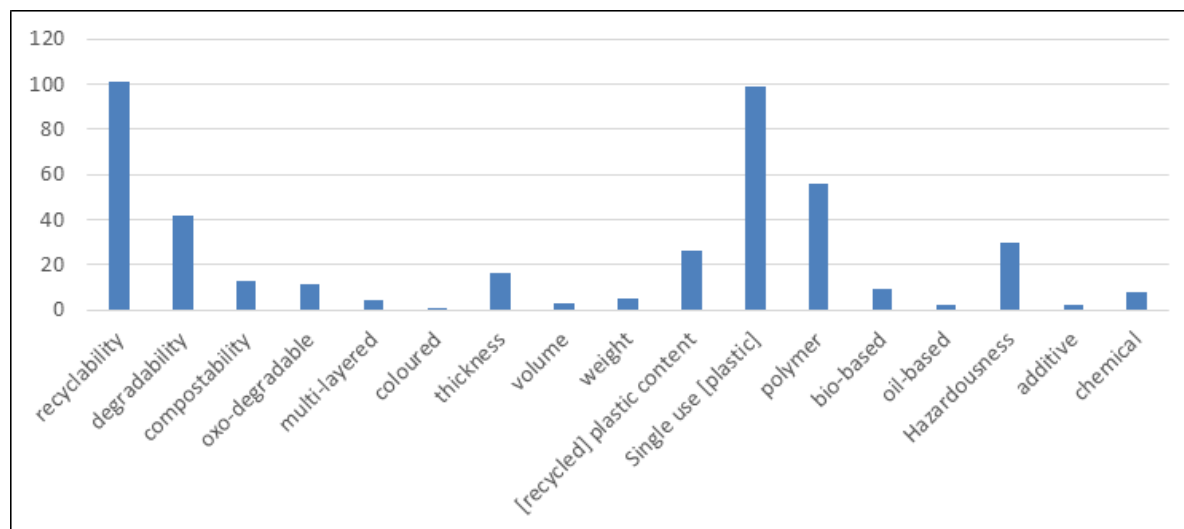
53. Medical products have been specifically referred to in 12 TrPMs. In most cases (10), TrPMs refer to such products as exempted from bans and/or restrictions on plastic content to ensure continuity of their use for medical and health purposes (e.g. plastic bottles used for medicines; plastic stemmed cotton buds and swabs used for certain products in the health sector; plastic bags [exclusively] used to package medical plants, prescription-only medicine or other medical purposes; plastic straws for those who need them to eat or drink).

2.5.6 Type of criteria used to identify products targeted by TrPMs

54. The survey also allowed for a second categorization of the products covered to be developed based on the criteria or specific concern/objective reflected in the TrPM when targeting a particular product. This was possible in 195 of the 223 TrPMs, offering a different perspective through which to understand the data and targeted products. As can be seen in graph 13, the criteria used were varied and largely reflect the different objectives already explored in this report.

²⁰ The EU counting as 27 Members.

²¹ One additional TrPM addresses "microplastics" not associated with care products, but rather from a more general, marine pollution perspective.

Graph 13. Harmonized types of criteria

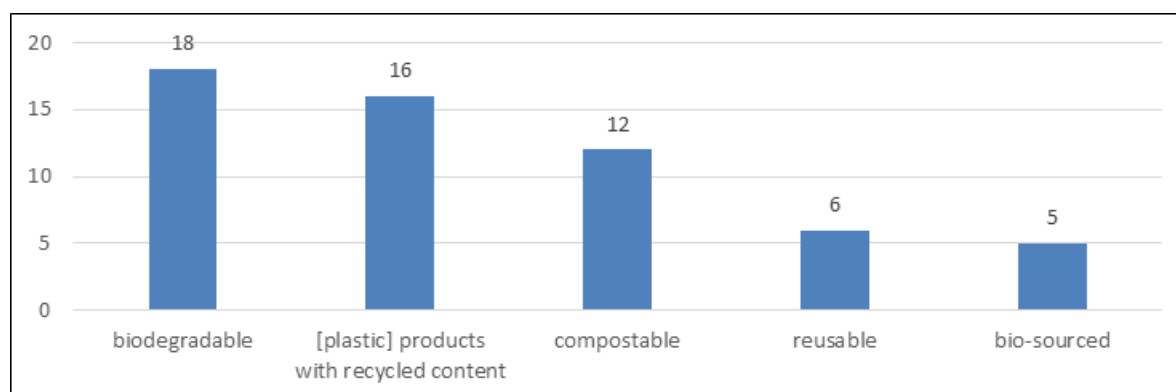
55. Recyclability of the product targeted was the criteria most often identified (in 101 TrPMs), confirming the relevance of this criterion in the survey dataset. Many TrPMs, for instance, will refer to the potential/viability of the targeted product to be [commercially] recycled or refer to its negative impact on other recyclable materials or process to justify its restriction. Similarly related to the end of life of the product targeted, degradability (42) and compostability (13) were also targeted in several TrPMs.

56. Not surprisingly, the "single-use" nature (or disposability) of products was another criterion often present in survey TrPMs (99). As already explored above, whether a certain "polymer" was used or the existence of certain [recycled] plastic content in a product are two criteria often present in TrPMs (in 56 and 26 TrPMs respectively). Finally, a series of other criteria were identified to a lesser extent, including hazardousness (30 TrPMs) of the targeted products or their components, their particular effects on human, animal and/or plant life and health, and/or their negative effects on the [marine / aquatic] environment.

2.5.7 Products "promoted"

57. As mentioned above, "promotion" has been a key topic of discussions in the Dialogue. While the objectives of 'promotion of alternatives and substitutes' and of 'waste management and other technologies' were identified in 76 and 28 TrPMs, respectively, the information available in the survey TrPMs does not allow for the identification of the specific products targeted by these measures in the same degree of granularity and details as those restricting and/or regulating plastic and other products.

58. Nevertheless, the survey allowed for the identification of five broad categories of products targeted by the 76 TrPMs aiming to promote 'alternatives and substitutes'. Those categories are: i) biodegradable; ii) compostable; iii) bio-sourced (e.g. made from biomass, or bio-based); iv) reusable; or v) made (at least in part) of recycled material. Graph 14 provides the breakdown of TrPMs promoting these categories of products.

Graph 14. Categories of products promoted by TrPMs

59. The category most often identified in the TrPMs are those promoting biodegradable products (18). As mentioned, very few specific goods/materials are expressly indicated as considered as biodegradable (e.g. some bio-sourced materials following a specific certification), with the TrPMs identified largely promoting biodegradable products in general. The same is true for compostable (12 TrPMs) and reusable (6) products in the survey. As already explored, 16 TrPMs promoted products containing recycled content. Reusable products were targeted in six TrPMs, while 5 promoted "bio-sourced" products, plastics made of biomass or particles of "natural origin" [not liable to persist in the environment].

60. Finally, materials like biomass, wood, pulp kraft paper, cellulose, bagasse, bamboo, palm, edible cutlery, and specific bio-based plastics (CPLA, PBS), were expressly targeted in one of the TrPMs. Another TrPM expressly referred to "synthetic fibres made from biomass materials" (for use in textiles/clothing and construction material) and "aluminium canned (bottle) water".

2.6 Challenges and needs in the implementation of TrPMs

61. The survey provided an opportunity for respondents to indicate existing challenges and potential needs in the implementation of TrPMs. Respondents could provide free-text answers to the question and/or select specific challenges/needs from a harmonized list. Fifteen Members provided answers to this question relating to a total of 54 individual TrPMs.

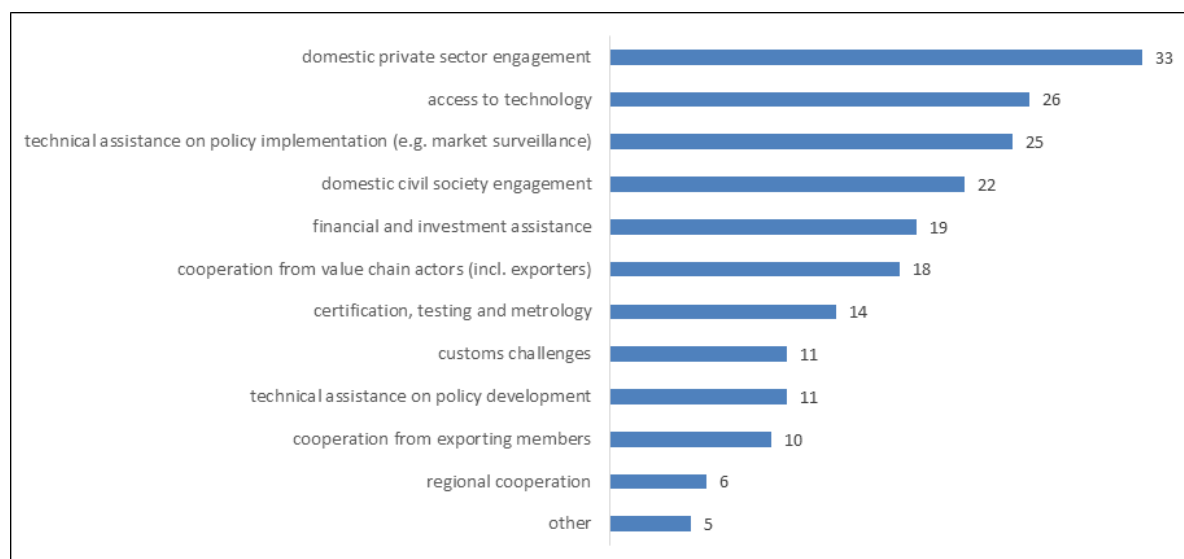
62. The free-text answers (available for 38 TrPMs) provide a wide range of challenges indicated by respondent, both in general and specific terms. Table 4 below provides an overview of some recurrent challenges and concerns.

Table 4. Overview of challenges and concerns expressed through free-text replies

General challenges/concerns	Specific challenges/concerns
Rapid increase in plastic pollution	Competitiveness and cost-of-living concerns
Negative effects on the [domestic] natural/aquatic environment	Multi-stakeholder, public, civic engagement, including communication strategies
Negative effects on economic sectors such as tourism or on health	Private sector / [recycling] industry participation
Lack of adequate domestic waste management / recovery / recycling infrastructure	Unintended negative impacts on health and vulnerable populations
Lack of enforcement	Access to internal/external funding/financing
Domestic coordination	Customs control training, upgrade, adaptation
Need for training/capacity building	Absence of international standards

63. For the harmonized list, 12 options were provided, and respondents could select more than one challenge/need.²² Graph 15 provides the breakdown of answers for the 50 TrPMs covered.

Graph 15. Challenges and needs indicated for the implementation of TrPMs



64. The most common challenge among the answers covering the 50 TrPMs was domestic private sector engagement with 33 entries (66%). When contrasted to the objectives that these 50 TrPMs were seeking to achieve, it is interesting to note that domestic private sector engagement is included as a particularly relevant challenge in most of such measures seeking to promote reuse and remanufacturing (11 out of 15 TrPMs – or 73% - seeking such objective for which needs were indicated), promotion of alternatives and substitutes (78%) and addressing single-use plastics (76%).

65. The second most often selected challenge was access to technology, in 26 TrPMs (52%). This challenge was alluded to relatively uniformly for all objectives pursued, roughly in half of the TrPMs seeking each objective. There was however a relatively high incidence of the objective for measures pursuing chemical, toxic, and hazardous substances management (11 out of 14 TrPMs – or 79% - seeking such objective for which needs were indicated) and recycling (60%). This confirms the importance respondents assign to accessing technologies to ensure safe and sustainable downstream operations. It also worth noting that all but one of these TrPMs (10) also indicated 'technical assistance on policy development' as a particular need. This represents almost all TrPMs which indicated this particular need in the survey – 11 (22% of the total).

66. Technical assistance on policy implementation was the third challenge/need most often found in the survey, with 25 entries (50% of TrPMs with challenges indicated). This need was similarly alluded to relatively uniformly for all objectives pursued, with a particularly high incidence in TrPMs seeking to address waste management (including its trans-boundary movement) and leakage avoidance (19 out of the 25 TrPMs, or 76%) and recycling (68%).

67. The fourth challenge/need most often found in the survey was domestic civil society engagement, with 22 TrPMs (44%). There was a clear preponderance of this need in TrPMs seeking to address single-use plastic (17 out of the 22 TrPMs indicating this need included this objective) and waste management and leakage avoidance (13 out of 22), while it was found more scarcely for other objectives.

68. Finally, for other challenges/needs identified, a few insights were able to be captured in the dataset. First, for those TrPMs indicating the challenge of certification, testing and metrology (14),

²² The harmonized options were access to technology; technical assistance on policy development; technical assistance on policy implementation (e.g. market surveillance); certification, testing and metrology; customs challenges; financial and investment assistance; domestic private sector engagement; domestic civil society engagement; cooperation from exporting Members; cooperation from value chain actors (incl. exporters); regional cooperation; other.

there was a relatively high incidence of the objectives to address single-use plastics (11) and promote alternatives and substitutes (7), implying the relevance respondents accord to verification and certification of claims for the implementation of these objectives. While only 10 TrPMs indicated the challenge of 'cooperation from exporting Members' (only 20% of the total), they were relatively overrepresented in the challenges identified to implement TrPMs to address chemical, toxic, and hazardous substances management, potentially reflecting the need for cooperation under international agreements such as the BRS Conventions.

69. When examining the data from the perspective of the harmonized objectives pursued, it is notable that TrPMs seeking to address single-use plastics seemed to indicate the widest range of needs. For all but one of the harmonized challenges/needs identified, addressing single-use plastics was an objective included in more than 70% of the TrPMs identifying the need (on average 77%). This seems to imply that, more than for other objectives, there is a wide variety of challenges and a clear need for different kinds of support when addressing this topic. Finally, the breakdown of challenges/needs faced by TrPMs pursuing "eco-designing" indicates a relatively higher importance of the specific needs of access to technology (identified in 14 of the 20 TrPMs – or 70% - targeting such objective) and policy implementation (12 of 20 – 60%).

2.7 Mechanisms to assess efficacy and efficiency of TrPMs

70. The final type of data captured by the survey and examined in this report is whether there were mechanisms in place to assess the TrPM's efficacy and/or efficiency and targeted results. Forty-four TrPMs in the survey contained information on the matter, 39 of which included a mechanism to assess efficacy and/or efficiency or which already provided results (5 simply indicated that not targets had been set). These 39 TrPMs came from 15 different Members. An analysis of the responses indicates four general types of information were provided: i) specific targets to be achieved in a certain horizon; ii) instruments used to assess, monitor and evaluate the implementation of the TrPM and the achievement of its objectives; iii) the entities involved in the monitoring/assessment; and iv) results of the TrPMs implementation already reported.

71. Table 5 provides an overview and examples of the information contained in the survey for each of the four categories.

Table 5. Overview of mechanisms to assess efficacy and efficiency of TrPMs

Target	Instrument	Entity involved	Results
Reduction [in waste] and recycling goals [not specified] to be achieved in the period 2020-2030	Forms	certifying entities of plastic bags	Products fully stopped entering the market
By 2024, a comprehensive monitoring system is established, covering 250 cities	Performance reports	concerned Bureaus/units under the Department of Environment and Natural Resources	Reduction from 283 to 89 bags/inhabitant/year in 2019.
Target [to be established] on the recovery of plastic beverage container	Annual sworn declarations	Municipalities, manufacturers, and waste generating businesses	Reduction at the domestic level of the consumption of plastic bags for containment and transport of goods and products
[increase in] Use of post-consumer plastic in their production process	Master management plans	Committee established to address, monitor and develop plastic pollution prevention programme	Collection and recovery of plastic packaging waste increased to 3%
The use of recycled plastic in packaging is increased by around 40% by 2022/23	Certification system	Independent third-party auditing	Single-use plastic carrier bags sold has fallen from 7.6 billion in 2014, to 197 million in 2021/2022, a reduction of over 97%

Targets by 2025: <ul style="list-style-type: none"> • 70% of plastic packaging being recycled or composted • 50% of average recycled content included in [all] packaging • 20% of average recycled content included in plastic packaging 	Industry reports [amount of plastic waste handled]	Domestic Directorate of the Environment	Retailers have donated over £200 million to good causes from the proceeds of the charge
	Waste statistics of plastic tableware disposed at landfill		Reduction of average annual <i>per capita</i> consumption of single-use carrier bags from 140 in 2014 to around 3 [in 2022]
	Register of producers, importers and recyclers of single-use plastics		After 1 year, estimated reduction of 80%, implying at least 650 million fewer bags used
	Routine and regular monitoring, evaluation and learning (MEL) processes		Beach litter data reflects falling numbers found on targeted beaches
	[[bi-]annual] Reviews [at least every 5 years]		Avoidance of delivery of around 4,800 million plastic supermarket bags
Targets by 2025 for industry: <ul style="list-style-type: none"> • 100% of packaging is reusable, recyclable or compostable • 70% of plastic packaging goes on to be recycled or composted 	Post-implementation review		Reduction in volumes of controlled plastic waste imported and exported
	Estimates of future performance		Plastic waste levy rate raised by one won/ton leading to waste reduced by 0.15%
	Compliance rate verification/monitoring		Proper disposal and recycling of domestic waste plastics
	Analysis of trade-related data for plastic waste		
	Regular audits of trade declarations		
	programmes to educate the public		
	[Independent third-party] auditing		
	Product stewardship arrangements		

72. While several targets were general in nature (e.g. "reduction in waste generation"; "increase in recycling [and recovering] rates"), they also varied in their time frames. Nonetheless, the time frames explicitly mentioned seemed to focus on the short to medium-term horizon (2023-2030). For the few TrPMs that mentioned explicit targets, those were based on % increases in recycling (e.g. 40%), % of total products being recycled (70-100%) and/or use of recycled content (20-50%).

73. The instruments used to assess, monitor and evaluate the implementation of the TrPM varied widely, including forms, reports, sworn declarations, registries, industry-led plans and product stewardship arrangements, certifications, waste management statistical data, trade-related data, spot-checks, audits and monitoring, periodical and post-implementation reviews, and public education programmes. The entities involved in the monitoring included varied governmental bodies (e.g. environment ministries, directorates and departments), municipalities, private sector, newly established committees and independent third-parties.

74. Finally, several TrPMs already indicated often impressive results achieved. These varied in format and nature, including absolute and relative reductions in consumption of targeted goods (e.g. "reduction from 283 to 89 bags/inhabitant/year"; "reduction of over 97% [of single-use plastic bags]"), % increases in collection and/or recycling of plastic wastes, decrease in leakage and littering, as well as results not directly related to the original objective of the measure (e.g. amount donated from plastic charges).