Trade-Related Policy Measures to Reduce Plastic Pollution:
Building on the state of play

IISD REPORT
Trade-Related Policy Measures to Reduce Plastic Pollution: Building on the state of play

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1.0 Introduction

The last century has seen a rapid expansion in the production and consumption of plastics globally. These lightweight, inexpensive, versatile, and durable materials have become essential components of many consumer goods and are seemingly irreplaceable in the medical and food sectors. In short: plastics have established a conspicuous presence at the core of the modern economy. In recent years, however, the image of plastics as a magic solution to manufacturing challenges has been fading quickly as concerns over plastic pollution become unavoidable. The Organisation for Economic Co-operation and Development (OECD) projects that plastics use will triple by 2060, with a similar increase in the amount of plastic waste emitted into the environment if business-as-usual is continued.

From threats to human health and livelihoods to adverse impacts on biodiversity and the broader environment, the wide breadth of problems associated with plastics are now well known. Many developing countries, especially Small Island Developing States or least developed countries, might find themselves particularly challenged facing the seemingly unstoppable plastic wave. Transitioning the world away from plastics is neither simple nor cheap, and it is difficult to envisage a scenario that allows all economies to completely abandon plastics within the foreseeable future. Virgin plastic production continues to be cheap, while recycling, when possible, is costly. Replacements are also not readily available for each plastic product and component, especially for the production at scale and at a comparable price point, whereas the reuse and refill systems are only picking up in some jurisdictions.

With so much reliance on plastics in the global economy, it comes as no surprise that plastic products are among the most internationally traded goods. However, developing reliable data on the exact amount of plastic that is traded internationally across its life cycle is challenging because of the numerous transformations that the product undergoes, as well as due to the high amount of plastic integrated into many internationally traded consumer goods, such as cars, domestic appliances, cosmetic products, etc. Data published by the United Nations

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1 Virgin plastics are produced from fossil fuels such as natural gas or petroleum that are highly subsidized, and such government support significantly lowers the costs of production of plastics as well (Steenblik, 2020).
2 As modeled by the OECD (n.d.a).
3 There is even evidence linking plastic pollution to the spread of infectious diseases (Maquart, et. al., 2022).
4 Scientists first drew attention to plastic pollution in marine environment in 1970s and the risks to marine ecosystems are probably one of the best explored areas of impact of plastic pollution so far (Lavender Law, 2017).
5 The International Energy Agency estimates that petrochemicals—a key component of the plastics industry—will become the largest driver of oil demand, accounting for nearly half of growth in demand by 2050, while the chemical sector ranks third among industrial greenhouse gas emitters (IEA, 2018).
6 The OECD estimates that greenhouse gas emissions from the plastics lifecycle would double by 2060, from 1.8 Gt to 4.3 Gt of carbon dioxide equivalent (OECD, n.d.a).
7 Among the specific challenges that developing countries are facing, the issue of unmanaged or mismanaged waste seems to be particularly acute, and made worse by additional imports of plastic waste and the absence of circular economy solutions (Browning et. al., 2021).
8 Even the OECD’s Global Ambition scenario only looks into the possibility of reducing plastics use and waste by one third while almost completely eliminating the plastic leakage to the environment (OECD, n.d.b).
Conference on Trade and Development (UNCTAD) estimates that the total value of exports of plastics at all stages of their life cycle, from raw materials to finished goods to plastic waste, reached nearly USD 1.2 trillion in 2021, corresponding to roughly 5% of global trade. It is also clear that any measures taken to reduce plastics consumption and production will also have an impact on international trade and that trade policy can play a significant role in tackling the global plastics challenge, even if it might not hold all the solutions.

So far, no plastics-specific multilateral trade agreement exists at the World Trade Organization (WTO). However, the 2019 Basel Convention Plastic Waste Amendments established control measures for the international trade of plastic waste, and the Stockholm Convention on Persistent Organic Pollutants already has control measures in place for persistent organic pollutants that are frequently incorporated into plastics for use as plasticizers and flame retardants. Thus, both the Basel and Stockholm Conventions have elements of international law relevant to trade and trade policy about plastics. UN member states have also established a mandate to start negotiations for a legally binding global treaty on plastics. In the context of this negotiating process for a UN Plastic Pollution Treaty, which is currently ongoing, trade is also heavily featured in the submissions that have been made by UN members and stakeholders to the Intergovernmental Negotiating Committee. And yet, even despite the absence of any broader international agreement governing trade in plastics, a wide range of governments have already put in place trade-related measures to fight plastic pollution and notified such measures to the WTO through the transparency mechanisms of existing agreements.

This report looks at the trade and trade-related plastic pollution reduction measures already taken and notified by WTO members, as collected in the WTO’s Environmental Database (EDB), in order to provide inspiration and ideas for further actions and international cooperation options. This report does not judge or qualify the measures governments have taken; that is, it does not list best practices. It does, however, look into the diversity of measures already in place and creates a basis for discussion about their design and impact. The report also aims to help those WTO members looking for ways forward in the global fight against plastic pollution to better understand what governments have chosen to do so far and reflect on what further action could be undertaken, including through international cooperation at the WTO. Knowing how some governments have used trade-related policy to address plastics provides others with examples of what can be done (and how), examples that policy-makers can assess in light of their domestic circumstances and their development objectives and adopt or adjust as suits their needs. It also provides a useful basis for thinking

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9 According to UNCTAD (2022), if global plastics trade were a country, it would become the 4th largest global exporter, smaller only than China, the United States, and Germany, yet larger than, for example, Japan, Netherlands, France or South Korea. It is, however, important to note that this methodology would sum up the values of internationally traded plastic production in several of its life stages each time it would cross the border: as plastic pellets, as finished plastic products, and as plastic waste, possibly all in one year.

10 UN member states endorsed a resolution on this at the UN Environment Assembly (UNEA-5) (UNEP, 2022).

11 A useful presentation on this was made by the Center for International Environmental Law at the pre-plenary meeting of the Dialogue on Plastics Pollution and Environmentally Sustainable Plastics Trade on February 16, 2023 (Center for International Environmental Law, 2022).
about what type of trade-related policy interventions are currently missing to address the plastics pollution crisis in the most effective way.

The report starts by providing a general overview of the plastic pollution reduction measures notified by WTO members, including their distribution by region, development status, types of targeted products, as well as types of policy measures (Section 2). In Section 3, the report then dives into more detail on the most common approaches taken by members, with a particular focus on bans. It zooms in on a number of concrete examples, illustrating the variety of ways in which members have chosen to establish such prohibitions, in particular regarding the plastic products that are targeted and how such prohibitions are constructed. Some of the less frequently notified kinds of measures are also highlighted. Finally, Section 4 concludes the report by reflecting on how policy-makers could build on existing measures as they contemplate and design their next steps in the fight against plastic pollution, possibly in the context of the WTO.
2.0 An Overview of Trade-Related Measures to Tackle Plastic Pollution

This report examines the trade-related policy measures to reduce plastic pollution that WTO members have notified to the WTO, as collected in the WTO’s EDB. Its focus is, therefore, on measures that governments themselves consider as having an impact on international trade and are therefore required to notify under different WTO agreements.

The EDB is curated by the WTO Secretariat, which regularly updates it with new environment-related notifications from the general WTO Notifications Portal and classifies them based on their objective, the type of measure, the sectors concerned, as well as other criteria. Therefore, a notification done following the requirements of any WTO agreement can be added to the EDB if it is deemed environment-related, yet some WTO agreements tend to produce more environment-related notifications than others. It is also important to note that not all trade-related information is collected in the EDB. It does not contain tariff-related information, which is collected elsewhere at the WTO. WTO notifications are also not expected to contain information about measures that are not covered by transparency requirements under existing WTO agreements, such as environmental taxes or government support policies that are not deemed to be subsidies. The information included in the EDB, ultimately, depends on WTO members’ compliance with their notification obligations, which is widely known to be imperfect.

While the range of measures included in the EDB is wide, this report focuses on policy interventions designed to reduce plastic pollution by restricting the production, use, and circulation of virgin, conventional, or other problematic plastics, as well as supporting the recycling of such plastics. As a result, it neither captures measures that aim to promote the use of certain alternatives or substitutes to such plastics, nor measures that apply to plastic products for which no clear link with plastic pollution reduction efforts could yet be identified in the relevant notifications.

Based on information from the EDB, the WTO received 211 notifications of environment-related measures that are linked to plastics between 2009 and 2021. A careful review of this list allows for the identification of 132 notifications of measures aiming to reduce plastic pollution, among which 93 unique measures can be identified—after removing duplicates, as

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12 The database is publicly accessible here.
13 See WTO, n.d.a.
14 More information about the EDB can be found at WTO, 2023b.
15 The highest number of environment-related measures notified in 2021 were under the Agreement on Subsidies and Countervailing Measures, followed by the Agreement on Technical Barriers to Trade (TBT Agreement), the Agreement on Agriculture and the Agreement on Import Licensing Procedures. On plastics-related measures specifically, for the same year, the highest number of measures was notified under the TBT Agreement, followed by the Decision on Notification Procedures for Quantitative Restrictions and the Agreement on Import Licensing Procedures.
16 There are several useful datasets that can be accessed here.
17 This is the number of notifications obtained when selecting the keyword “plastic” in the EDB’s search function.
the same measures can be notified several times. This section provides a general overview of these 93 trade-related plastic pollution reduction measures. In particular, it looks at the distribution of measures by region, development status, targeted product, and type of measure.

### 2.1 Geographic Scope of Existing Measures

The 93 different plastic pollution reduction measures that were identified were taken or put up for consultation by nearly 70 different WTO members (Table 1). This means that roughly half of the 164 WTO members have already taken and notified some type of action directly related to tackling plastic pollution through the use of trade or trade-related policy tools. The number of measures notified has also increased over time, with the highest number of notified measures in 2021 (the latest year for which data is available in the EDB as of the date of this publication), showing the issue’s growing prominence as a policy priority. This trend is expected to continue.

**Table 1. WTO members covered by notified plastic pollution reduction measures (2009–2021)**

<table>
<thead>
<tr>
<th>Afghanistan</th>
<th>Israel</th>
<th>Saudi Arabia</th>
<th>European Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>Japan</td>
<td>Senegal</td>
<td>Austria</td>
</tr>
<tr>
<td>Australia</td>
<td>Kenya</td>
<td>Seychelles</td>
<td>Belgium</td>
</tr>
<tr>
<td>Bahrain</td>
<td>Macao, China</td>
<td>Singapore</td>
<td>Bulgaria</td>
</tr>
<tr>
<td>Belize</td>
<td>Malaysia</td>
<td>South Korea</td>
<td>Croatia</td>
</tr>
<tr>
<td>Burundi</td>
<td>Mauritius</td>
<td>Switzerland</td>
<td>Cyprus</td>
</tr>
<tr>
<td>Canada</td>
<td>Moldova</td>
<td>Tanzania</td>
<td>Czechia</td>
</tr>
<tr>
<td>Chile</td>
<td>Morocco</td>
<td>Thailand</td>
<td>Denmark</td>
</tr>
<tr>
<td>China</td>
<td>New Zealand</td>
<td>Togo</td>
<td>Estonia</td>
</tr>
<tr>
<td>Chinese Taipei</td>
<td>Norway</td>
<td>Ukraine</td>
<td>Finland</td>
</tr>
<tr>
<td>Congo</td>
<td>Oman</td>
<td>United Kingdom</td>
<td>France</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>Paraguay</td>
<td>United States of America</td>
<td>Germany</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Philippines</td>
<td>Uruguay</td>
<td>Greece</td>
</tr>
<tr>
<td>India</td>
<td>Russian Federation</td>
<td>Viet Nam</td>
<td>Hungary</td>
</tr>
</tbody>
</table>

Source: Authors’ analysis based on EDB data.

The distribution of notified measures by region and members’ development status clearly indicates the universality of the problem of plastic pollution and the willingness of governments to tackle it, but also the fact that measures can be taken by members with very diverse levels of capacity and development. As shown in Figure 1, most measures were notified

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18 All individual EU members are included here, even those that have not notified such measures themselves, because they are all covered by the measures notified by the EU.
by members from Asia (32%), Europe (25%)19 and Africa (20%), followed by South and Central America and the Caribbean (10%), the Middle East (9%), and North America (4%). Looking at the development status of notifying members, 60% of such measures were notified by developing members, another 5% by least developed country members, and 34% by developed members.

**Figure 1.** Share of notified measures (a) by region and (b) by development status of notifying member (2009–2021)

Source: Authors’ analysis based on EDB data.

19 The measures notified by the European Union on behalf of all of its members were counted as one single measure, whereas the individual measures introduced and notified by individual EU members were added to the calculation as individual measures. This approach was chosen because the focus of this report is understanding the nature of notified measures and targeted products rather than their economic scope.
2.2 Products Targeted by Existing Measures

WTO member notifications vary in terms of the level of detail with which notified measures are described. However, these notifications provide a helpful glimpse into members’ priorities in tackling plastic pollution by highlighting the plastics and plastic products they have chosen to target in their reduction measures. It is notable that most notified measures target finished plastic products, in particular single-use plastic items used or sold in the retail, food and, increasingly, personal care sectors (Figure 2). The product categories targeted by the largest number of measures notified between 2009 and 2021 were plastic bags (30 measures) and plastic waste (28 measures), which likely reflects the fact that these two categories are widely recognized as environmentally harmful and perceived as a policy priority in plastic pollution reduction efforts.

Other categories of products that were targeted relatively frequently included plastic packaging, plastic food containers, plastic tableware, bottles, and straws, as well as rigid plastic foam—often in relation to food containers. Overall, measures targeting these types of products appeared slightly later in the period than measures on plastic bags and plastic waste. Some of these products (e.g., plastic food containers and, to a lesser extent, plastic packaging) featured particularly strongly in the notifications of 2021, which could be linked to the changes in shopping and food ordering patterns during the COVID-19 pandemic.

Two other categories—cotton buds and cosmetics containing microbeads—provide an interesting group of measures focused on the personal care sector. While not as widespread as measures focused on other products, these two categories show a separate area of focus of policy-makers where, particularly in the case of cosmetics containing microbeads, products are a direct cause of pollution from microplastics.

Finally, a number of measures targeted types of products that are not reflected in the main categories noted above, either exclusively or coupled with products reflected in these main categories. Because these other product categories were targeted only by one or a few measures, they were grouped in the category “others.” Such products include plastic beverage stirrers, fishing nets, some types of plastic films, rubber tires, balloon sticks, and fruit stickers, as well as some specific plastic materials (e.g., polyethylene), chemicals (e.g., plasticizers), components of particular plastic products (e.g., components of plastic bags), and plastic parts of other products (e.g., plastic parts of electronic displays).

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20 This is partly due to the different ways in which notification provisions have been drafted and developed by the WTO members across different WTO agreements and bodies. For example, the agreements on Technical Barriers to Trade and on Sanitary and Phytosanitary measures demand the notification of drafts of planned legislative acts at least 6 months before their adoption, without a follow-up requirement that would allow other WTO members to learn about the final outcome of the legislative procedure. Some other notification requirements demand less detail but require members to provide regular updates on existing measures. This is the case, for example, under some requirements of the Agreement on Import Licensing, as well as for quantitative restrictions notifications, or subsidy notifications. The information provided in notifications can also simply differ because not all WTO members implement their notification obligations in the exact same way.

21 Note that the total of all categories included in Figure 2 exceeds the total number of measures (93), because the same measure can target several types of products.

22 Any product (or material) targeted by fewer than five measures was included in that category.
Figure 2. Types of plastic products targeted by notified measures (2009–2021)

<table>
<thead>
<tr>
<th>Product</th>
<th>Number of measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic bags</td>
<td>30</td>
</tr>
<tr>
<td>Plastic waste</td>
<td>28</td>
</tr>
<tr>
<td>Plastic packaging</td>
<td>15</td>
</tr>
<tr>
<td>Plastic food containers</td>
<td>14</td>
</tr>
<tr>
<td>Plastic tableware</td>
<td>10</td>
</tr>
<tr>
<td>Plastic bottles</td>
<td>8</td>
</tr>
<tr>
<td>Plastic straws</td>
<td>7</td>
</tr>
<tr>
<td>Rigid plastic foam</td>
<td>7</td>
</tr>
<tr>
<td>Cotton buds</td>
<td>6</td>
</tr>
<tr>
<td>Microplastics</td>
<td>6</td>
</tr>
<tr>
<td>Others</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: Authors’ analysis based on EDB data.

2.3 Types of Measures in Place

Member notifications also shed light on the types of trade-related policy instruments that are most commonly used to address plastic pollution. Figure 3 provides an overview of the types of plastic pollution reduction measures notified by WTO members, revealing that many of these measures are quite strict in dealing with certain plastic products. In reading that figure, it should be kept in mind that a measure can correspond to several types of measures—when it uses more than one type of policy instrument—and be included in several categories.

Almost two thirds of the measures (60 out of 93) included a ban or prohibition of some sort. These bans targeted various types of plastic products that WTO members wanted to exclude from their domestic markets. The imposed bans fell into two broad categories: bans relating to plastic waste (12 measures) and those imposed on other types of products (49 measures), in particular various single-use plastic items like bags, food containers, tableware, or packaging. A more detailed analysis of such bans is included in Section 3.1 of this report, looking both at the types of products that these prohibitions target and how they are implemented. A separate section (Section 3.2) looks at the bans and other measures targeting plastic waste.

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23 As a result, the total of all categories included in Figure 3 exceeds the total number of measures (93).

24 “Ban” and “prohibition” are used synonymously in this report.
Technical regulations or specifications are also an important category, with a total of 54 measures. This category covers measures proposed or adopted to ensure that the plastic products present in a market, or imported to that market, match certain criteria. Importantly, technical regulations or specifications were often an important part of the measures introducing bans. They often served as vehicles to establish prohibitions, with WTO members using such regulations or specifications to clearly define the criteria for products to be allowed into, or banned from, their market. A majority of the measures categorized as technical regulations or specifications above are thus also included in the “ban/prohibition” category (40 measures), because they clearly exclude certain types of plastic products from the market of the notifying member. A number of technical regulations or specifications, however, were also introduced through measures that were not related to a ban (14 measures). These measures introduce different requirements, such as recycled content requirements for plastic products, extended producer responsibility schemes, additional labelling requirements, or requirements concerning plastic waste and its disposal and recovery.

A smaller but related category of notified measures is conformity assessment procedures (9 measures). These procedures are used by WTO members to determine if a given product fulfills the requirements set out by a specific technical regulation, specification, or standard. As such, they are closely related to—and almost always notified as part of—the same measures as those falling in the technical regulations or specifications category. Conformity assessment procedures essentially accompany another requirement by establishing the process for assessing conformity with such a requirement.

25 In a few cases, measures that include a type of ban also included technical regulations or specifications that were not directly related to the ban, for example, applying to different products. These measures also appear in both categories.
The third most popular type of measure is the introduction of import licensing requirements, with a total of 25 measures containing such a requirement. These measures were mostly, but not exclusively, targeted at the import of plastic waste (15 measures). Import licensing schemes for other categories of plastics (11 measures) mostly focused on plastic bags (7 measures). Following the adoption of the Plastics Amendments to the Basel Convention, WTO members also started to notify export licensing schemes related to plastic waste, which is linked to the Prior Informed Consent (PIC) procedure that must be followed under this UN treaty for transnational movement of some categories of plastic waste. So far, however, only five members have notified such export-related measures. As in the case of technical regulations, a number of measures introducing import licensing requirements also included a prohibition and were thus also included in the “ban/prohibition” category, for example, in the case of non-automatic import licences that were used to enable the import of certain goods exempted from a more general prohibition.

Finally, other types of instruments can also be relevant but have so far been used and notified only a few times by WTO members—they are regrouped in the “Others” category in Figure 3. These include subsidies (three measures), transit-related requirements (two measures), and measures related to risk assessment and public procurement (one measure each).
3.0 Unpacking Common Approaches Taken

Establishing a clear understanding of the measures members have implemented to reduce, control or avoid plastics (as well as which specific types of plastic products or materials have been targeted) is important because it can help determine how these measures can be built upon. Opportunities to build on existing measures include

- Expanding the range of countries that implement certain plastic pollution reduction measures on certain products and activities.
- Increasing the range of products or activities targeted by policy measures.
- Expanding the range of measures that could be applied to a particular product or activity to more effectively address its contribution to plastic pollution.

This section breaks down the 93 measures noted in Section 2 by outlining what members chose to do and which plastics were targeted. It highlights the approaches that were most commonly taken by members, illustrates the diversity of measures through concrete examples, and sheds light on a number of other, less frequent types of measures that have been notified by some members.

3.1 Types of Prohibitions and Products Covered

To better understand the exact nature of existing plastic pollution reduction measures notified by members, a first essential area of focus is prohibitions. Bans are both the most common and the strictest type of policy intervention used by members. Looking closer at measures introducing prohibitions, the category of plastic waste was set apart because it arguably constitutes a distinct policy issue, which is already covered by an existing international instrument—that is, the plastic waste amendments to the Basel Convention, and part of the notified measures are related to the implementation of this multilateral environmental agreement. For that reason, it will be covered separately in Section 3.3.

Figure 4 thus summarizes information on the types of bans imposed on plastic products, except for bans on plastic waste. Of the different types of prohibitions notified, bans on imports were included in 34 measures, closely followed by bans on sale (33 measures), bans on manufacture (23 measures), bans on use (20 measures) and bans on free distribution (16 measures). Only two measures included an export prohibition. While import bans are an important category, a large majority of them were part of measures that also introduced bans on the domestic sale, use and/or manufacture of a particular plastic product. This suggests that prohibitions are not generally introduced with the main objective of restricting trade flows but rather designed as more general economy-wide policy instruments that also affect the cross-border movement of products.

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26 Policy measures addressing plastic waste specifically target the end stage of plastic products’ life cycle, which is a qualitatively different policy issue than bans affecting the circulation of plastic products in an economy.
Measures that prohibit the import or entry into a market of any specific product can have a strong impact on international trade and are regulated by some of the most fundamental rules of the General Agreement on Tariffs and Trade: that measures should not discriminate between imported and domestically produced goods (i.e., “national treatment”) and that quantitative restrictions on trade in goods must be avoided. There are, however, exceptions to these rules allowing measures introduced for the purpose of protecting the environment, for example. These exceptions are subject to strict conditions, including that these measures do not constitute a disguised restriction on international trade. Prohibiting the import, but not the sale, use, or domestic manufacture of a particular plastic product could raise some doubts about the effectiveness of a policy measure against its stated objective and its true motivation (i.e., such restrictions may be primarily motivated by protectionist, rather than environmental objectives).

There are only nine measures that set out an import prohibition that was not also accompanied by a prohibition on the production or circulation of the same product in the member’s market. But the reasons for this may have little to do with protecting local plastic manufacturing. Members may choose to focus policy efforts on restricting imports when no domestic manufacturing capacity exists. In some cases, domestic sale and manufacturing prohibitions may have been included in a different legal act that was not mentioned in the WTO notification of that member.
While both the number of plastic pollution reduction measures notified by WTO members and the number of WTO members notifying them are quite high, the products targeted by such measures—in particular, those introducing bans—are not particularly diverse (Figure 5).

Bans and prohibitions make up the largest part of the plastic pollution reduction measures identified using the EDB, focusing largely on products for consumer use in either the retail or food sectors. Plastic bags are the most frequently banned item (24 measures) and, together with prohibitions for plastic packaging (eight measures), are a category as that can have an impact on both retail and food sectors. A range of plastic products used in the food and beverage sector (especially takeaway food services) were also targeted quite often, mostly aiming at single-use plastic food containers (12 measures), tableware (nine measures), straws (seven measures), and bottles (three measures). Plastics present in cosmetics and personal care items were also well represented with a number of bans aimed at cotton buds with plastic stems (six measures) and microplastics present in cosmetic products (five measures).

It is interesting to note that UNEP’s paper has collected a much higher number of bans on plastic bags (UNEPa, 2018). This does not necessarily imply that there are problems with the transparency commitments at the WTO but could rather demonstrate that the impact of domestic measures (as most of those bans are bans on sale, use, or distribution) on international trade is not always clearly or equally understood by different government agencies.

The popularity of bans on plastic bags can be easily explained by their prevalence in marine waste and in common litter, high pollution when left in soil, as well as the damage done to wildlife and ecosystems. Similarly, common among the ocean debris were plastic bottles, straws, stirrers, and takeaway food containers (UNEP, 2018b).
The “Others” category is also relatively significant and groups the prohibitions related to products that were only rarely targeted—be it exclusively or together with items that are more commonly targeted. While these products are not a frequent focus of the prohibitions that notified by members, they include products that are quite different from the most targeted categories and add an interesting degree of diversity. These products include fishing nets, plastic beverage stirrers, balloon sticks, rubber tires, components of plastic bags and films, as well as plastic parts of consumer electronics. Interestingly, they also include specific plastic materials (e.g., polyethylene) and chemicals.

The fact that many members have already introduced highly restrictive policy measures on a relatively small number of plastic products has two key implications. First, it points at a circumscribed group of products that are quite commonly banned due to environmental or health concerns and, as such, could serve as an inspiration for other members that have not yet introduced restrictions on these products. Second, it also shows that the plastic pollution reduction measures notified by WTO members leave large parts of the plastics economy untouched, raising the question of what other products or materials they could or should be targeting for their efforts to be more effective. These two implications are important to keep in mind for WTO members as they contemplate the next steps they could take in their efforts to tackle plastic pollution, be it domestically or as part of international cooperation efforts, in particular in the context of negotiations toward the establishment of a Global Plastics Treaty or the WTO’s Dialogue on Plastics Pollution and Environmentally Sustainable Plastics Trade (DPP).

### 3.2 A Deep Dive on Design and Implementation of Existing Prohibitions

No changes in trading regimes come without a price to the exporters—and often to the consumers of imported goods. Governments amending regulations to restrict the circulation of a certain product in their domestic market will often try to assess the urgency of the situation against the potential cost or harm of a new rule on their consumers and businesses. In cases where bans or prohibitions are introduced with the goal of reducing plastic pollution, governments will likely weigh the expected environmental gains against the costs associated with the disappearance from the market or the replacement of consumer goods (e.g., plastic bags, plastic cutlery, and plastic foam containers for takeaway food). The necessity of a particular plastic product or material in the economy, the degree of urgency with which a government wants to ban it due to its environmental or health risks, and the availability of replacements (including refilling and reusing systems) are important factors in the choice of when and how a prohibition might come into force. These factors can vary significantly from one context to another, or from one product to another, meaning the most appropriate strategy will vary according to circumstances.

This diversity in what members perceive as being the most suitable approach to ban a given product in a particular context is reflected in the prohibitions notified to the WTO. In addition to questions related to the types of activities and products governments decide to ban (see Section 2), there are at least three important dimensions along which these prohibitions can differ: (1) the exact way in which banned items are defined, (2) the types of exceptions that
may apply to the bans, and (3) the temporality of how such bans are introduced. The following three subsections provide concrete examples to illustrate how such diversity materializes.

Figure 6 illustrates the three key dimensions of prohibitions used by WTO members, which are subsequently explored in further detail. Importantly, these three dimensions are closely linked. The exact scope of products targeted by a ban will undoubtedly influence the perceived need for particular exemptions and the timeline for the introduction of the measure. Within each dimension, a combination of approaches will often be used, for example, by defining target products in terms of their material composition as well as other physical properties and end-of-life considerations.

Figure 6. An illustration of three key dimensions of a plastics-related prohibition

<table>
<thead>
<tr>
<th>Targeted products</th>
<th>Exemptions</th>
<th>Temporality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Material composition</strong></td>
<td><strong>Products with particular qualities</strong></td>
<td><strong>Immediate</strong></td>
</tr>
<tr>
<td>Polymers and additives</td>
<td>(e.g., biodegradability)</td>
<td>Immediate ban</td>
</tr>
<tr>
<td>Recycled content</td>
<td><strong>Physical properties</strong></td>
<td><strong>Transition period from entry into force</strong></td>
</tr>
<tr>
<td><strong>Use-related criteria</strong></td>
<td><strong>Particular uses</strong></td>
<td></td>
</tr>
<tr>
<td>Types of activities</td>
<td>(e.g., medical purposes, research, waste collection, or fresh food packaging [for bags])</td>
<td></td>
</tr>
<tr>
<td>Places where products are used</td>
<td><strong>Particular sectors</strong></td>
<td><strong>Ban introduced in gradual steps</strong></td>
</tr>
<tr>
<td>Sectors</td>
<td>Health, agriculture, food, others</td>
<td><strong>Gradual</strong></td>
</tr>
<tr>
<td><strong>End-of-life considerations</strong></td>
<td><strong>Others</strong></td>
<td></td>
</tr>
<tr>
<td>Non-biodegradability</td>
<td>Particular situations (e.g., no substitutes for export or emergency situations)</td>
<td></td>
</tr>
<tr>
<td>Difficult recyclability</td>
<td>Types of institutions or establishments</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ analysis

The first column of this figure elaborates on a similar categorization of criteria used to define single-use plastic bags presented by the WTO Secretariat to the DPP (WTO, 2022).
How Have Members Defined the Products to Be Banned?

While prohibitions are clearly designed to keep what governments perceive as harmful or unwanted plastics away from their markets, there are different approaches and criteria used by members to define exactly what products they want to ban. This can be as simple as prohibiting all items of a certain kind from a market if they are made of plastic, such as a ban on all plastic straws or forks. Seychelles’ ban on plastic straws (notified in G/MA/QR/N/SYC/2), for example, simply prohibits the manufacturing, importation, distribution, and sale of plastic straws for use in the country and provides a definition of “plastic.”

Some prohibitions adopt a similar, simple approach in defining banned items but focus on non-biodegradable plastic products. For instance, Togo’s Decree No. 20111-003/PR of January 5, 2011 establishing national procedures for the management of plastic bags and packaging (notified in G/TBT/N/TGO/2), prohibits the production, importation, distribution, and marketing of non-biodegradable plastic bags and packaging (a number of exceptions are also included). Similarly, Mauritius’ ban on the import, manufacture, sale, or supply of plastic bags (notified in G/TBT/N/MUS/12) only applies to non-biodegradable bags, with biodegradable bags subject to import licensing.

Many prohibitions, however, define the products to which they apply in a more granular way, which also often provides a reasonably good idea of what the members introducing such bans see as preferable alternatives. Such alternatives can usually be implicitly identified through the criteria defining banned products, and therefore also indirectly allowing other products in a market. Looking at the differences between the criteria used by different members, it is also clear that members’ views on what constitutes harmful plastic products or preferable products can vary significantly. For example, while some WTO members focus on the material composition of products and whether they are made of materials that they find preferable to conventional, virgin plastics (be it certain polymers, biodegradable plastics, or products made out of recycled plastic), others focus more on the resistance and reusability of conventional plastic products, on the activities for which products are used, or on their recyclability.

A common strategy to promote the reusability of plastic carrier bags is to mandate a mandatory level of thickness for the bags present in a market, while banning bags that do not fulfill that criterion. An example is New Zealand’s proposal for a mandatory phase-out of the sale or distribution of single-use plastic shopping bags (notified in G/TBT/N/NZL/83). This proposed ban also covers bags made of degradable plastic (e.g., biodegradable, compostable, oxo-degradable), and a “single-use” bag is defined as any bag below a certain threshold of thickness, proposed to be set at either 50 microns or 70 microns. The threshold retained in the final regulation, now in force, is 70 microns.

30 When referring to notified measures, this report systematically indicates the document number of the relevant notification as well as an in-text hyperlink to access that notification. When the same measure was notified several times, the document number used is that of the most recent notification. In a number of cases, the information presented in the examples was found in the original act that a notification refers to, not in the notification itself.

31 A UNEP report collected data from 41 countries that have material content requirements for plastic bags, as well as 38 countries that have legal thickness limits varying from 15 to 250 microns (UNEP, 2018c).
Oman also used the thickness criteria in its mandatory standard for reusable polyethylene shopping bags, which is notified together with the ministerial decree prohibiting the import of single-use plastic bags (notified in G/TBT/N/OMN/408). However, in this case other requirements are also added, including in relation to recyclability. The standard includes a mandatory thickness requirement of no less than 50 microns, coupled with requirements using other resistance indicators, and specifies that bags must be able to be reused at least 125 times and recycled at the end of their use.

Using another type of criterion, Korea’s Act on the Promotion of Saving and Recycling of Resources (as notified in G/TBT/N/KOR/857) introduces a prohibition that targets the material composition of certain plastic products. A ban is imposed on polyvinyl chloride packaging and coloured polyethylene terephthalate bottles due to their negative impact on recycling processes, with some exemptions for situations in which these packaging items are deemed to be the most necessary. Interestingly, the same act also establishes an evaluation, grading, and labelling system in relation to the recyclability of packaging products, which aims to promote easy-to-recycle packaging through consumer information.

The bans included in Ecuador’s Organic Law for the rationalization, reuse, and reduction of single-use plastics and its implementing regulation (notified in G/TBT/N/ECU/506) use an interesting mix of criteria. Different plastic products are banned based on their single-use nature (e.g., straws). In some cases, single-use bans are coupled with additional criteria, such as the places where the products are sold or used (e.g., plastic bags and containers for food and drinks in ecologically important places), the uses for which the products are intended (e.g., bags and packaging of newspapers), whether they are recyclable (e.g., tableware), the types of plastics and additives they contain (e.g., bags and other products containing certain additives, or rigid plastic foam containers for food), and the share of post-consumer recycled content in their composition (e.g., bags, tableware, and rigid plastic foam containers).

**How Have Members Determined What Should Be Exempted From a Given Ban?**

The prohibitions notified by WTO members are rarely completely indiscriminate, applying equally to the entire economy and population. They typically include exemptions that are used, for example, to protect particular sectors, institutions, segments of the population, types of usage of a given product, or products with particular characteristics. This reflects the fact that bans, by definition, are strict policy measures that affect the availability of certain products on the domestic market. A common step in the design process of such bans is, thus, to assess where in society or the economy the use of the targeted product is the most necessary and what groups and/or sectors are the most vulnerable to the planned prohibition, and decide accordingly whether any exemption would be justified. The process of determining what exemptions a government considers to be appropriate, if any, can be guided by economic, but also social and environmental considerations. The mix of exemptions established under the different measures notified by WTO members can differ significantly, even if applying to the same products. These differences are due to the need to adjust the parameters of bans to unique domestic contexts as well as the priorities and choices made by policy-makers.
Seychelles’ ban on the manufacturing, importation, distribution, and sale of plastic straws (notified in G/MA/QR/N/SYC/2), for example, includes only one exemption for plastic straws provided as part of pre-packaged products. The approach included in Scotland’s prohibition of a range of single-use plastic products (notified in draft stage, as part of Scotland’s broader environmental regulation on single-use products, in G/TBT/N/GBR/41) provides for a more wide-ranging set of exemptions from the ban on plastic straws. These exemptions apply to medical devices and purposes, pharmacies, catering and other establishments (e.g., care homes, schools, prisons), personal care services, and straws used as packaging. One of the key considerations behind these exemptions was the need for persons whose disabilities or medical conditions made the use of plastic straws necessary to continue to access these products.32

A common focus of the exemptions established by members as part of their prohibitions is the medical sector, although other sectors can also be exempted. For example, Burundi’s prohibition of the importation, manufacture, marketing, and use of plastic bags and other plastic packaging (notified in G/TBT/N/BDI/8) includes seven exemptions, three of which are closely related to the medical sector: for medical services, for industrial and pharmaceutical packaging, and for research laboratories. The other exemptions apply to biodegradable products, the industrial construction sector, tent manufacturing, and education. For some of these flexibilities (in particular regarding tent manufacturing), the attempt to cater to the specificities of the domestic economy seems clear. Another example is the EU’s prohibition on the sale of a number of single-use plastic items (notified in G/TBT/N/EU/642), which exempts plastic cotton swabs that are used in relation to medical devices.

Looking at plastic bags and packaging in particular, other types of sectoral or usage-specific exemptions included in several prohibitions include products used in the agricultural sector, for waste collection, and for the packaging of food (in particular, fresh and perishable items).

Some bans also explicitly exempt biodegradable or compostable products from their application, which produces, in effect, the same result as compared to prohibitions that define targeted products as non-biodegradable (or non-compostable) products.33 Relevant examples include Ukraine’s ban on the sale and distribution of plastic bags (notified in G/TBT/N/UKR/210) and Seychelles’ prohibition of the manufacturing, importing, distributing or selling of plastic bags (notified in G/MA/QR/N/SYC/2), which also includes 11 other exemptions. In a slightly more restrictive way, France’s decree on the methods for implementing a limitation on disposable plastic bags (notified in G/TBT/N/FRA/166) includes an exemption for compostable bags that are at least partly composed of bio-sourced material.

Finally, some of the exemptions focus on particular situations. These include a provision in South Korea’s ban on certain packaging items (notified in G/TBT/N/KOR/857) that

32 This was explained by a representative of the Scottish government in a thematic session of the TBT Committee on regulatory cooperation between members on plastic regulation, which was held on March 7, 2023 (WTO, 2023a).

33 At the time of writing, data from the EDB covered notifications submitted by 2021. These notifications may not yet cover new policy developments based on the most recent research on biodegradable, biobased, or compostable plastics, which may encourage more cautious approaches toward these materials, such as the EU Commission’s proposed policy framework (European Commission, 2022).
exempts packaging that does not have substitutes available on the market and an exemption in Seychelles’ ban on plastic bags (mentioned above) for bags that are manufactured for export.

**How Have Members Determined How Swiftly to Introduce Bans?**

A third key dimension where bans can vary significantly is the temporality of their introduction. While some prohibitions are introduced with immediate effect, others are introduced more gradually to provide time for society—or for particular groups—to adapt. Here again, the different approaches taken by WTO members can reflect both diverging domestic circumstances and the specific priorities of policy-makers. Factors that can influence a ban introduction timeline include the perceived urgency of the environmental problem a ban is meant to address, the possibility or ease for economic actors and the population at large to do without the banned products, and the political influence of various interest groups.

Some of the bans notified by members apply from the moment the legal act, regulation, or amendment introducing them enters into force. This includes, for example, Switzerland’s prohibition of the placing on the market and use of oxo-degradable plastics (notified in G/TBT/N/CHE/263), and Chinese Taipei’s ban on the import, sale, and production of cosmetics products containing plastic microbeads (draft notified in G/TBT/N/TPKM/249; amendment in G/TBT/N/TPKM/375). Such an approach does not, however, necessarily mean that the prohibition will apply to concerned economic actors in a completely unannounced way. The date of entry into force can also be chosen to allow for some time between the moment the measure is announced and the moment it enters into force. In the case of Chinese Taipei, notified documents explain that the planned date of entry into force provided companies with at least 20 months from the date of the pre-announcement of the draft restrictions. Here, it should be noted that the TBT Agreement sets out a regulatory framework that supports the provision of time to adapt to the requirements of an announced measure—in this case, by granting at least 6 months between the adoption and the entry into force of a measure.

Other prohibitions include some form of transitory mechanisms designed to help affected economic actors adjust to the measure from its entry into force. A common mechanism to accomplish this is simply the provision for a transition period from the moment the relevant piece of legislation enters into force. For example, Côte d’Ivoire’s Decree No. 2013-327 of May 22, 2013 prohibiting the production, importation, marketing, possession and use of plastic bags (notified in G/TBT/N/CIV/3), included a 6-month transition period for companies to comply with the decree’s provision. A similar transition period was included in Congo’s ban on the import, sale, and use of plastic bags and films (notified in G/TBT/N/COG/1). Sweden’s draft regulation to ban the placing on the market of cosmetics containing plastic microbeads (notified in G/TBT/N/SWE/132) also provided for a proposed 6-month transition period from entry into force, but only for the remaining stocks of products that have legally entered the market before entry into force.

A more gradual approach can be seen in Paraguay’s notification G/TBT/N/PRY/91 which outlines a plan to “promote the gradual replacement of single-use polyethylene bags by other reusable bags and/or biodegradable bags, and encourages the development of the production of bags made from biodegradable materials.” While single-use polyethylene bags were not immediately prohibited in 2017, a minimal price for such bags was introduced
to start changing consumer preferences. In addition, a system increasing thresholds was also established to gradually replace such bags with reusable bags, bags containing a high percentage of recycled plastic, or biodegradable plastic or paper bags—setting a new target for every year between 2017 and 2023.

Ecuador also uses a threshold-based mechanism to gradually ramp up the application of its ban on a series of single-use plastic items (notified in G/TBT/N/ECU/506). The relevant law and its implementing regulation set out minimum thresholds of recycled content that different products must contain at a given time to be allowed on the Ecuadorian market. For plastic bags, for example, the minimum recycled content requirement is 50% from 18 months after entry into force, increasing to 55% (36 months after entry into force) and ultimately 60% (48 months after entry into force).

Finally, Seychelles’ ban on plastic bags is an interesting case (last notified in G/MA/QR/N/SYC/2). Looking at the notified regulations individually does not indicate any mechanism for gradual introduction of measures to restrict the use of plastic bags. Some of the notifications, however, clearly explain that different measures have been introduced sequentially due to the population’s dependency on plastic bags and the perceived need to phase out the use of plastic bags gradually through different stages. A first step consisted of increasing the minimum thickness of plastic bags, initially to 30 microns (in 2008) and then to 50 microns (in 2015), in order to still allow people to use plastic bags while avoiding the thinnest bags, which are most difficult to reuse. A ban on the import, manufacture, and sale of plastic bags was then introduced in 2017.

3.3 The Special Case of Plastic Waste: What restrictions are already in place?

Despite a two-thirds reduction in the international trade of plastic waste compared to what it was in 2010, about 8 million metric tonnes of plastic waste were still traded internationally in 2018, with a corresponding value of USD 3.3 billion, according to UNCTAD. Trade-related measures affecting plastic waste deserve their own section, not only because of the number of measures that were notified to the WTO but also because restrictions to the international movement of plastic waste, which represent the vast majority of such measures, aim to address a specific policy issue that is covered today by an existing international instrument: the Basel Convention Plastic Waste Amendments that entered into force on January 1, 2021.

By their very nature, these restrictions are also focused more exclusively on trade than bans and other measures affecting other types of plastic products, which are

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34 In particular documents G/TBT/N/SYC/1 and G/TBT/N/SYC/3.
35 More insights about the impact of prohibitions on international trade in plastic waste in Ritchie, 2022.
36 UNCTAD also highlighted that the value of trade in plastic waste is dwarfed by the trade in plastics in other stages of their life cycle (UNCTAD, 2020). It is, however, important to note that a lot of plastic waste is being traded while not being classified as such and there is an increasing understanding about this (International Pollutants Elimination Network, 2023).
37 More information about the Annexes II, VIII and IX to the Basel Convention is available in UNEP, n.d.a. These annexes have the objectives of “enhancing the control of the transboundary movements of plastic waste and clarifying the scope of the Convention as it applies to such waste.”
often more general domestic prohibitions that also ban the manufacture, use, or sale of such products (alongside imports).

The most trade-relevant provisions of the Plastic Waste Amendments establish control procedures for transboundary movements of plastic waste, including the need to follow a PIC procedure\(^{38}\) for two types of plastic waste: those that are deemed to be hazardous and those deemed to require special consideration. The third type of plastic waste is that which is presumed not to be hazardous. If the plastic is meant for environmentally sound recycling—and not for incineration, landfill, or waste-to-energy operations—and almost free of contamination, there is no need to follow the PIC procedure for this third category. The Basel Convention’s Plastic Waste Amendments clearly have the potential to significantly reshape international trade in plastic waste as well as countries’ approaches to environmentally sound plastic waste management.\(^{39,40}\)

The first two notifications at the EDB related to plastic waste restrictions date back to 2010 and inform WTO members about import licensing requirements for the import of plastic waste introduced in Thailand and India. By the time the Basel Convention Plastic Waste Amendments were adopted in 2019, notifications related to prohibitions of certain (or all) plastic waste import or about corresponding import licensing procedures had been submitted by 12 WTO members. In 2019–2021, this group was joined by another eight members, while the 12 members that had notified existing measures previously continued to update their notifications, sometimes indicating that their legal justification was the implementation of the Basel Convention. PIC procedures affect both the import and export of plastic waste, but only three WTO members notified waste-related restrictions as export licensing procedures as well as import licensing procedures since 2020. Overall, 79% of measures on waste were notified by developing countries, showing that better control of plastic waste imports is a clear priority for many of them. This proportion is somewhat higher than the share of bans on other products notified by developing countries, including least developed countries, which is 60%.

Import/export prohibitions and import licensing requirements were the principal measures affecting plastic waste notified by WTO members. There were so few other types of measures notified that they can easily be outlined below.

In 2012, Saudi Arabia notified a draft technical regulation establishing guidelines for the recovery and recycling of plastics waste. The measure established “the different options for the recovery of plastics waste arising from pre-consumer and post-consumer sources,” as well as “quality requirements that should be considered in all steps of the recovery process” (notified in G/TBT/N/SAU/394). Ecuador’s 2012 notification provided information on draft technical regulation creating requirements concerning the disposal of disused plastic products and plastic waste and preventing practices that might lead to the mishandling of these materials (notified in G/TBT/N/ECU/86). Finally, in 2017 China’s Environmental Protection Control

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\(^{38}\) There is more details about this procedure available in [UNEP, n.d.b.](#).  
\(^{39}\) In the context of plastic waste, it is important to note that another set of amendments to the Basel Convention will enter into force in 2025 and will deal with electronic and electric waste ([UNEP, n.d.c.](#)).  
\(^{40}\) Another important amendment to the Basel convention is the Ban amendment adopted in 1995, which prohibits the export of hazardous wastes from member states of the European Union, OECD, and Liechtenstein to all other countries ([International Pollutants Elimination Network, 2020](#)).
Standard for Imported Solid Wastes as Raw Materials (notified in G/TBT/N/CHN/1233) created environmental protection requirements for imported waste and scrap of plastics, closely linking it to its earlier plastic waste import restrictions. Two other measures related to plastic waste management were subsidy programs by Romania and Thailand, which are discussed in the following section.

3.4 Other Trade-Related Instruments

While a big part of notifications in the EDB focus on bans targeting specific plastic products and import restrictions on plastic waste, it is important to note that a number of alternative approaches have also been adopted (and notified) by some WTO members. Such measures shed light on the range of instruments that can be used by members in addressing specific plastic products that are not seen as good targets for prohibitions or when thinking of broader measures to target broader categories of plastics.

Technical Regulations

As discussed earlier in this report, many technical regulations have been used to define the criteria or qualifiers of prohibitions targeting certain plastic products that WTO members deemed to be most harmful or least needed in their economies. However, some of the notified technical regulations and specifications were not related to a ban and used a softer approach, aiming to provide guidance to the market rather than explicitly prohibiting certain products. Overall, 14 such technical regulations or specifications—sometimes accompanied by conformity assessment procedures—were notified to the WTO, a selection of which is presented below to highlight different approaches taken by the notifying members.

Some members chose to use standards as a way to shape the markets of certain plastic products but did so through different approaches. Saudi Arabia’s example, referenced earlier in this report, sets a standard establishing different options for the recovery of plastics waste (notified in G/TBT/N/SAU/394). Tanzania’s standard for garbage bags (notified in G/TBT/N/TZA/395) sets out the general characteristics, requirements, and methods for testing such bags, including requirements regarding recycled content as well as recyclability and biodegradability. China also notified a standard that aims to restrict excessive packaging in the food and cosmetics sectors, including terms and definitions, specific requirements, and detection rules (notified in G/TBT/N/CHN/1502).

Setting requirements for minimal content of recycled material was an approach included in several notified measures. For example (and on top of Tanzania’s standard mentioned above), the United States notified a draft proposal of the State of Washington’s Department of Ecology (notified in G/TBT/N/USA/1810) that would demand the inclusion of a specific amount of post-consumer recycled content in specific types of plastic packaging. France also notified a decree (notified in G/TBT/N/FRA/211) that establishes requirements for a

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41 The amount is specified separately and was set at 10% for plastic trash bags (with additional labeling requirements) and 15% for plastic beverage bottles on January 1, 2023. The minimal recycled content threshold will gradually increase, as will the scope of covered products (Department of Ecology, University of Washington, n.d.).
minimum of 25% recycled plastic in polyethylene terephthalate-type plastic bottles from 2025, with a subsequent increase to 30% in 2030.

A separate category of notifications relates to labelling requirements enabling consumers to distinguish between recyclable and non-recyclable plastics. Lithuanian law on the management of packaging and packaging waste (notified in G/TBT/N/LTU/22) establishes a labelling requirement for products with packaging that is subject to a deposit scheme, including plastic bottles. The EU notified a draft Commission Regulation (notified in G/TBT/N/EU/609) that applies to electronic displays to be placed on the EU market and requires recyclability marking on the plastic parts of displays, among other measures. As part of efforts to enforce its Act on the Promotion of Saving and Recycling of Resources, South Korea notified guidelines for a new “separate discharge” mark for the products or materials that are difficult to recycle that should be used for certain packaging products, including those made of coated or laminated plastic, as well as of multilayered mixed materials (notified in G/TBT/N/KOR/956). It is interesting to note that the same Korean law also sets out a rather comprehensive policy to decrease the generation of waste, including plastic waste, and encourage circularity. This law includes, among others, measures against overpackaging, in particular, to restrict empty space and the number of layers used in the packaging of different goods, such as food and beverages, cosmetics, clothes, or consumer electronics.

**Subsidies**

Subsidies can affect the economy of plastics across their life cycle, from tax breaks to the producers of crude oil and natural gas to investment incentives for plants producing plastic resin or finished plastic products, to government support for collecting or recycling plastic. While transparency challenges with regard to WTO members’ subsidy programs may impact the extent to which such measures are notified, some of the existing notifications in the EDB shed light on the activities that some governments have chosen to support in their efforts to reduce plastic pollution.

For example, Thailand’s program entitled Encouraging the Transformation of Plastic Waste Into Fuel Oil (in G/SCM/N/315/THA) provided subsidies for the refineries that purchased fuel oil produced from plastic waste as long as the referenced oil price stayed lower than THB 14.50/litre. Romania’s subsidy program entitled Allocation for Environment Protection provided grants for recycling waste resulting from plastic packaging (notified in G/SCM/N/253/EU/Add.22).

Lastly, China notified a preferential tax treatment (value-added tax refund) scheme for products produced with integrated utilization of resources that, among other things, aims to encourage increased use of recycled polyester materials and recycled plastic products (G/SCM/N/315/CHN).

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42 For a useful exploration of where and how subsidies can impact the production of plastics, see Steenblik, 2020.

43 Continued delays in the submission of subsidy notifications were highlighted once again at the WTO Committee on Subsidies and Countervailing Measures meeting on May 2, 2023 (WTO, 2023).
Government Procurement Measures

While the initial EDB search returns several notifications related to the use of government procurement to support the fight against plastic pollution, all of these notifications currently belong to only one member: Japan. First notified in 2011, Japan’s Basic Policy for the Promotion of the Procurement of Eco-Friendly Goods and Services (last notified in GPA/37/ADD.10) requires the procurement decisions made by government institutions to follow a number of environmental criteria on top of more conventional considerations, such as price and quality. This policy was revised several times and re-notified accordingly. In particular, a list of items for green procurement is accompanied by the evaluation criteria to be used when procuring such items. Both of these lists are being regularly reviewed and adjusted as needed.

The list of plastic items in Japan’s Basic Policy includes stationery items (e.g., ink pads, staplers, adhesive tapes, bookstands, media cases, paint brushes, envelopes with plastic windows, waste bins, and packing straps), office furniture, office equipment (e.g., copiers, printers, fax machines, scanners, computers, displays, mobile phones, refrigerators, microwaves, and air conditioners), and textile products (e.g., shoes, carpets, tents, safety nets, flags).

The environmental criteria to be used in the process of evaluation of each supplier proposal are also adjusted according to the items to be procured. For the plastic items being procured, the rules can set out a clear requirement for a minimal amount of recycled plastic used in its production. For more complex products, such as consumer electronics used in government offices, the requirements are more nuanced and may demand the use of recycled plastic in the production of certain plastic parts.

In addition, the policy also lists services where the use of plastic items might occur, such as laundry and dry cleaning (e.g., plastic bags and plastic hangers), installation of vending machines (e.g., plastic trash bags), meeting operations (e.g., use of single-use plastic products, containers, and packaging when serving beverages or meals), and requires environmental criteria to be followed in their evaluation too. For example, it states that beverages or meals cannot be served in single-use plastic products or that only plant-based plastic is allowed when providing plastic bags in the context of laundry service. This example is particularly interesting as it directly addresses the use of plastics in the provision of services that may be traded.

A clear link between the requirements of this policy and Japan’s commitments under the Government Procurement Agreement is also established, aiming to ensure that Japan’s efforts to ensure the greening of its government procurement do not undermine its commitments to trading partners.

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44 One of the recent translated versions in English (Government of Japan, n.d.).
45 In Article 1.2 of the Basic Policy document (Government of Japan, n.d.).
4.0 Conclusions and Recommendations

While the picture of plastic pollution reduction measures taken by WTO members emerging from this analysis of the EDB is not comprehensive, it clearly demonstrates that plastic pollution is a policy priority for a large share of the WTO membership. Perhaps more importantly, the research sheds light on measures that members have already taken to address it. The report distills some of the key insights from the 93 notified measures that have been identified as aiming to reduce plastic pollution by acting on the production, use, and circulation of conventional plastics and plastic products. In doing so, it highlights that the most common measures are prohibitions imposed in relation to a number of single-use plastic items, while restrictions on the import of plastic waste are also widely used. Other types of policy interventions include technical regulations and specifications not related to bans, subsidies, and government procurement measures.

By providing a clear overview of the spectrum of existing policy interventions, this report can be used as a tool to inform a broader discussion about the next steps that could be taken by WTO members in their plastic pollution reduction efforts. Below are a few key considerations regarding such further steps.

4.1 Enhanced Transparency and Experience Sharing

WTO members provide a good deal of transparency about their efforts to fight plastic pollution in their notifications, in particular when providing information on measures that they consider to be quantitative restrictions, technical regulations, or licensing requirements. Some other instruments, however, may not be as well covered by notifications due to long-standing challenges with transparency in specific WTO bodies or simply because not all types of measures are subject to a notification obligation (e.g., internal taxes).

The absence of a single and unified plastic-related notification requirement—and, as a consequence, of a unique information provision standard—also means that information on plastic pollution reduction measures reaches various WTO bodies differently. For example, a notification to the Committee on Technical Barriers to Trade and a notification to the Committee on Import Licensing typically follow very different formats. Information about the same measure can also be submitted to several committees because it might fall within the requirements of more than one WTO transparency provision.

46 It is also important to note that not all measures aiming to address plastic pollution are trade related and/or notified to the WTO. For example, no information on plastic taxes exists at the EDB, as this type of instrument is not within the WTO’s domain; however, there is a broad range of fiscal measures available for the countries that would be willing to use them, such as those outlined by the International Monetary Fund (Matheson, 2019).

47 This, in particular, was noticeable with the measures related to the implementation of the plastic waste amendments of the Basel Convention, and this might also arise as an issue with the measures that would be taken to implement the results of the UN Plastics Treaty currently being negotiated. While multilateral environmental agreements usually have their own notification procedures, a more organized exchange about the implementation of their trade-related aspects could take place among WTO members.
As is often the case with measures taken to address similar public policy objectives, the WTO does not provide much scope for discussions about the effectiveness of specific measures in achieving plastic pollution reduction unless they cause significant disruption of international trade and lead to other members taking some type of action as a consequence. Members’ notifications thus contribute to shed some light on the policy interventions used by members to tackle the plastics crisis, but the coverage and consistency of the information provided is imperfect, and no regular WTO body currently allows for the analysis of existing measures in a more comprehensive and systematic way.

Over the last two-and-a-half years, some of the WTO members in the DPP have used their participation to share information about their domestic policies, including by responding to a survey on plastic-related trade measures. Discussions related to plastic pollution have also intensified in recent years in the WTO’s Committee on Trade and the Environment, and a dedicated thematic session on plastic regulation was held in March 2023 under the auspices of the Committee on Technical Barriers to Trade. Coordinated transparency and experience sharing around plastic-related policies thus seems to be an area of growing interest where further useful work could be undertaken by WTO members.

In particular, members may want to explore whether and how more comprehensive information about domestic trade-related plastic pollution reduction measures could be regularly shared across WTO bodies, discussed in a coordinated way, and how already available information can be used in the most useful and practical way without necessarily adding to existing notification obligations. Such sharing would allow for a better understanding of existing trends and experiences, which may, in turn, inform discussion along lines members decide is useful, for example, on the impacts of existing or proposed measures, their expansion or even on possible best practices. There might be an important role for the WTO Secretariat to play in this, possibly in close cooperation with the secretariats of relevant multilateral environmental agreements (MEAs) or other international organizations. Another important question relates to what the most suitable forum and format would be for such more structured and continuous exchanges about WTO members’ plastics policies, including both environmental and trade-related aspects.

### 4.2 Geographic Expansion and Best Practices

While the notified measures that aim to reduce plastic pollution cover almost half of the WTO membership (69 members), these measures are not imposed on an endless variety of products. This report has shown that there are a relatively small number of product categories on which most of the measures (in particular, bans) focus. These existing focus areas suggest some level of convergence among a number of WTO members that these specific product categories are policy priorities and deserve policy interventions.

Even when focusing on the same product categories, however, different measures are far from being harmonized. Each particular measure was designed by the authorities of a particular

48 Depending on the situation, such actions might include bilateral consultations, a request to discuss that specific measure at the next meeting of the WTO committee, or even escalating to a full dispute settlement procedure.

49 More information on that is available at [WTO, n.d.b](#).
WTO member, looking at its specific economic and environmental circumstances and considering what policy interventions would make the most sense from an environmental perspective—while also not causing excessive disruption for economic operators and consumers. Some of these measures, especially the early ones, have been taken at a time when only a few (if any) precedents or case studies existed to learn from. Today, however, certain conclusions could probably begin to be drawn about their impact.

Against this backdrop, a key question for WTO members active on the plastics issue (in particular DPP members) is how they can, collectively or individually, take inspiration from existing measures to intensify their efforts to address the plastics crisis and make them more effective. There are at least two ways this could be done. First, members could look at existing focus areas and consider how WTO work—possibly in the context of the DPP—could become a catalyst for the **geographic expansion** of measures that have already been taken by several members. In other words, how can discussion at the WTO help more members in their decision on whether to implement the types of measures on particular products that have already been identified as priorities and implemented by other members? As an illustration, Table 2 looks at bans—the most common type of measures—and identifies the members that have notified such measures in relation to different product categories. A geographic expansion process could simply be initiated by individual members independently, considering for themselves whether some of the most common measures would be appropriate in their own domestic context, but it could also be encouraged as part of a more collective effort. Such an effort could constitute a possible initial area of focus for DPP members.

Second, members may take advantage of their growing common experience with existing measures to identify ways to improve the measures they take, including by enhancing their effectiveness and minimizing the amount of disruption they generate. This process could also allow, for each already targeted product category, the determination of whether additional measures—of a different nature than existing ones—would seem justified. In other words, could WTO work help members to learn from the knowledge acquired by each other in implementing particular plastic pollution reduction measures on particular plastics, and to amend their measures or introduce new ones to reflect what is understood as being **best practices** for dealing with specific product categories or activities? Here again, some members may choose to start moving in that direction on their own, but collective action could help to increase the coordination among measures, reducing the transaction costs of differing standards or requirements.
Table 2. Members that have notified a prohibition in relation to particular products

<table>
<thead>
<tr>
<th>Product</th>
<th>Members with notified bans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic bags</td>
<td>Afghanistan, Albania, Bahrain, Burundi, Congo, Côte d’Ivoire, Ecuador, France, Kenya, Mauritius, Mauritius, New Zealand, Oman, Paraguay, Senegal, Seychelles, Togo, Ukraine, Uruguay</td>
</tr>
<tr>
<td>Plastic food</td>
<td>Ecuador, Chinese Taipei, European Union, Korea, Macao, Mauritius, New Zealand, Seychelles, United Kingdom, United States</td>
</tr>
<tr>
<td>containers</td>
<td>Burundi, Chinese Taipei, Congo, Ecuador, France, South Korea, Togo, United States</td>
</tr>
<tr>
<td>Plastic packaging</td>
<td>Burundi, Chinese Taipei, Congo, Ecuador, France, South Korea, Togo, United States</td>
</tr>
<tr>
<td>Plastic tableware</td>
<td>Ecuador, Chinese Taipei, European Union, Macao, Mauritius, New Zealand, Seychelles, United Kingdom</td>
</tr>
<tr>
<td>Plastic straws</td>
<td>Belize, European Union, Mauritius, New Zealand, Seychelles, United Kingdom</td>
</tr>
<tr>
<td>Cotton buds</td>
<td>European Union, France, Italy, New Zealand, United Kingdom</td>
</tr>
<tr>
<td>Rigid plastic foam</td>
<td>Ecuador, European Union, Seychelles, South Korea, United States</td>
</tr>
<tr>
<td>Microplastics</td>
<td>Canada, Chinese Taipei, France, Italy, Sweden, Switzerland</td>
</tr>
<tr>
<td>Plastic bottles</td>
<td>Ecuador, European Union, South Korea</td>
</tr>
<tr>
<td>Others</td>
<td>Bahrain, Congo, Ecuador, European Union, Japan, Mauritius, Moldova, New Zealand, Russian Federation, South Korea, Thailand, United Kingdom</td>
</tr>
</tbody>
</table>

Source: Authors’ analysis based on EDB data.

4.3 Thematic Scope Expansion

As highlighted above, most notified measures target a relatively narrow scope of products (mostly single-use plastic products) and focus on the end consumer in either the retail sector or food industry, as well as plastic waste. While this provides a helpful initial set of products to look at for members who have not yet implemented restrictive measures on these categories (geographic expansion), it also raises the following question: what more can be done to tackle plastic pollution (particularly in terms of the targeted products and activities)? In other words, are there any types of products, or any parts of the plastics economy, that are currently not (or rarely) targeted by members but deserve to be? This process could be referred to as thematic scope expansion.

Members could thus explore whether and how WTO work, including under the DPP, could help identify new areas of policy intervention that would allow the delivery of meaningful results in their fight against plastic pollution. In doing so, a pragmatic approach would be to start by analyzing where further action is the most feasible today. This would require identifying what other types of plastic materials or items are important contributors to plastic-related environmental problems but can also easily be fully abandoned (e.g., excessive plastic packaging) or easily replaced by other available products with a lighter environmental footprint at a reasonable cost.
A few of the notified measures covered in this report did not address the same commonly targeted product categories and may thus hint at potential new areas of focus. These include measures applying to some types of plastic films, for example, as well as measures applying to fishing nets, particular plastic materials (e.g., polyethylene) and chemicals (e.g., some plasticizers), components of particular plastic products (e.g., components of plastic bags) and plastic parts of other products (e.g., plastics parts of electronic displays). A few members have also notified softer and broader (sometimes economy-wide) measures that may also demonstrate interesting results. These measures include interventions aimed at enabling consumers to choose less harmful goods by improving the information available to them, increasing recycling rates, making producers or importers share the responsibility of plastic waste management, or promoting more environmentally responsible government procurement. In general, measures that have been taken by one or just a handful of members may be a good starting point for an exploration of what could constitute the next important areas of common focus.

For some specific products, the situation may be of a different nature—particularly when such products play a key role in the economy or society, and no real substitutes or replacement services are currently available (as is the case for some medical or food hygiene applications). This does not mean, however, that no policy intervention is possible, but rather that other instruments will be more relevant than bans or strong restrictions. Such situations might demand more out-of-the-box thinking about the best ways to encourage the innovation or economic viability of possible alternative solutions.
References


WTO. (2023a). Thematic session on regulatory cooperation between members on plastic regulation (Moderator’s report). https://www.wto.org/english/tratop_e/tbt_e/tbt_0703202310_e/tbt_0703202310_e.htm
