MINDEROO FOUNDATION

# THE PLASTIC POLLUTION FEE

## Outlining the options ahead of INC-3

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## Acknowledgements

**Minderoo Foundation**
Established by Dr Andrew Forrest AO and Nicola Forrest AO in 2001, Minderoo Foundation is a proudly Australian philanthropy that fights for a fairer future. It takes on tough, persistent issues with the potential to drive massive change. One of its key programs is to stop plastic pollution by adopting a comprehensive life-cycle approach to plastic management.

**Authors**
Dominic Charles and Margot Dons, Minderoo Foundation

**Analytical Partners**
Eunomia
Systemiq

**Advisory Group**
Steve Fletcher, University of Portsmouth (Chair)
David Azoulay, Centre for International Environmental Law
Mark Barnaba, Fortescue Metals Group Limited
Luisa Cortat, Academy of European Law
Carolyn Deere Birkbeck, Forum on Trade, the Environment & the SDGs
Kimberley Botwright, World Economic Forum
Tim Grabiel, Environmental Investigation Agency
Ilona Millar, Gilbert + Tobin
Ambuj Sagar, Indian Institute of Technology, Delhi
Mark Spicer, KPMG

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**This Design Study explains the key characteristics of a plastic pollution Fee and identifies options of how to design the Fee.**

**Feedback and consultation on the Design Study will inform subsequent work towards an Impact Study on the plastic pollution Fee, to be published in the first quarter of 2024 (ahead of INC-4).**

**We expressly welcome and solicit feedback from any interested stakeholders, including government, civil society and business. Please contact dcharles@minderoo.org and mdons@minderoo.org**

## Summary


The United Nations Environment Assembly (UNEA) has mandated the negotiation of a legally binding international instrument to end plastic pollution, including in the marine environment (Instrument), with a view to protecting health and the environment. To achieve this objective, several stakeholders have proposed that the Instrument incorporates a **plastic pollution fee (Fee)**.

These stakeholders highlight that a Fee could be:

(i) An innovative financing instrument to fund the costs of the Instrument's implementation, especially for developing countries, complementing traditional funding sources and uses. Fee revenues could be used to meet the unique costs that the international community faces in ending plastic pollution (such as helping countries, especially developing countries, in closing the gap between rates of plastic waste generation and the ability to manage plastic waste in a safe and environmentally sound way).

(ii) An economic instrument to support possible control measures that, collectively, address the full lifecycle of plastics. Depending on its design, the Fee could potentially induce switching to, for example, safe, environmentally sound and sustainable recycled plastic contents, or alternative plastic products, and reduce total demand for plastic products.

The Intergovernmental Negotiating Committee (INC) Chair's Zero Draft text (Zero Draft), published last month, explicitly proposes a plastic pollution fee as an innovative financing instrument and recognises the potential of a Fee as an economic instrument.

With the goal of assisting policymakers, and other stakeholders, in considering the inclusion of a plastic pollution Fee in the Instrument, Minderoo Foundation has launched a project to assess design options for a Fee, covering both functional and technical aspects, and to model the potential impacts of a Fee. The project aims to enhance understanding of how a Fee could be formulated and implemented, provide information on the contributions that a Fee could make to ending plastic pollution, and promote discussion among interested stakeholders. At all stages of this project, Minderoo Foundation actively and expressly seeks comment from interested stakeholders, including government, civil society and business.

The project will be completed in **two stages**:

(i) In this paper ("Design Study"), we explain the key characteristics of a plastic pollution Fee and identify options of how to design the Fee as a financing instrument and as an economic instrument. We explicitly invite all stakeholders to express their views on the proposed options.

(ii) In a forthcoming paper ("Impact Study"), to be published in the first quarter of 2024 (ahead of INC-4), we will quantitatively model the impact of the Fee as a financing and as an economic instrument, based on design choices informed by stakeholder engagement. We intend to model the impacts on financing implementation of the Instrument, especially in developing countries; on switching behaviour; and on overall demand for plastic products; and the impacts on sustainable development (environmental, social and economic).

In terms of **key characteristics**, a plastic pollution Fee could provide a stable and predictable source of funding for treaty implementation; could support possible control measures that address the full lifecycle of plastics; and could ensure a level playing field for the private sector entities subject to the Fee. To this end, and consistent with the polluter pays principle, the Fee could be imposed on the production of plastic polymers, at the start of the plastics value chain leading to all plastic pollution, and where the number of entities is relatively small. The Fee could be administered by the national authorities of the country of production. That is, the country of production could impose, collect and enforce the Fee, in line with the principle of sovereignty.

To ensure that the plastic pollution Fee can address pollution costs across the globe, irrespective of where polymers are produced, the revenues raised from the Fee could be shared. The producing countries could retain a part of the revenues (retained share), with the remainder redistributed among a group of eligible countries (redistributed share). The retained share could, at a minimum, cover the producing countries' costs of administering the Fee, while the redistributed share could allow the Fee to serve as an innovative means of funding treaty implementation, in particular for developing countries, transferring at least some of the responsibility for ending plastic pollution to plastics producers.

The Fee could complement traditional funding sources (including by governments) under the Instrument and help to ensure full treaty implementation. That is, the Fee could **provide a reliable source of funding for some of the significant and unique costs associated with ending plastic pollution**. These costs include:

(i) the development and maintenance of safe and environmentally sound waste management infrastructure, in particular in developing countries

(ii) supporting the development of reuse, refill and repair systems

(iii) supporting substitution to safe, environmentally sound and sustainable alternative plastic and non-plastic products, chemicals and polymers

(iv) addressing legacy plastic waste

(v) ensuring a just transition for affected populations.

In considering the Fee, policymakers and other stakeholders need a solid understanding of the design options for a Fee, whether it is intended to operate primarily as a financing instrument or, additionally, as an economic instrument. Those design options relate, for example, to the legal nature of a Fee, who pays it, on what basis, and with what exemptions; and how should revenues best be allocated, according to what criteria, to contribute best to ending plastic pollution. This Design Study explores these and other design issues.

Specifically, the Design Study is structured as follows:

- Potential roles of a plastic pollution Fee, as a financing instrument and as an economic instrument (Section 2).

- Functional design options with respect to (i) the main features of the Fee and (ii) the distribution of the revenues it raises (Section 3).

- Additional technical design options relating to the implementation of the Fee, including its legal character; administrative and governance structures; and its integration within the Instrument (Section 4).

- The Fee's relationship with other national policies and control measures, including how the Fee is distinct from, but potentially complementary with, national Extended Producer Responsibility (EPR) schemes (Section 5).

- Proposed scenarios for and approach to modelling the impact of the Fee in the Impact Study (Section 6).

- Further detail on the design options (Annex).

In the second stage of this project, as part of the Impact Study, Minderoo Foundation will explore the potential environmental, social and economic impacts of the Fee. Based on the different scenarios set out in Section 6 of this report, the Impact Study will consider the impact of the Fee as an innovative means of financing treaty implementation, and on its potential to affect switching to alternative products and to reduce overall demand for plastic products. The Impact Study will allow policymakers and other stakeholders to test the impact of different design options for the plastic pollution Fee. The Impact Study will be published in the first quarter of 2024 (ahead of INC-4).

# 1. Introduction and purpose of this paper

**1.1** **Background**. The UN Environment Assembly (UNEA) recognised that "the high and rapidly increasing levels of plastic pollution represent a serious environmental problem at a global scale, negatively impacting the environmental, social and economic dimensions of sustainable development."[1] Under UNEA resolution 5/14, an intergovernmental negotiating committee (INC) is developing an international legally binding instrument on plastic pollution, including in the marine environment (Instrument). With the ambition to end plastic pollution, the Instrument "could include both binding and voluntary approaches, based on a comprehensive approach that addresses the full life cycle of plastic, taking into account, among other things, the principles of the Rio Declaration on Environment and Development, as well as national circumstances and capabilities".[2]

**1.2** **A plastic pollution fee (Fee)**. Meeting the objective of the Instrument to end plastic pollution will require a significant investment of financial resources[3], both public and private:

(i) to close the gap in many countries, especially developing countries, between rates of plastic waste generation and the ability to manage plastic waste in a safe and environmentally sound way

(ii) to support the development of reuse, refill and repair systems

(iii) to support substitution to alternative safe, environmentally sound and sustainable plastic and non-plastic products, chemicals and polymers

(iv) to address legacy plastic waste

(v) and to ensure a just transition.

In the context of this financing challenge, multiple stakeholders have proposed a plastic pollution Fee be incorporated into the Instrument, both (i) as an innovative financing instrument to fund treaty implementation, especially for developing countries, complementing traditional funding sources and uses; and (ii) as an economic instrument to support possible control measures that, collectively, address the full lifecycle of plastic.[4]

The Chair's Zero Draft text (Zero Draft), developed with the support of the INC secretariat and published on 4 September 2023, explicitly proposes a plastic pollution Fee as an innovative financing instrument.[5] It also recognises the potential for fees, as an economic instrument, to support control measures, by encouraging the use of more

[1] UNEA Resolution 5/14.
[2] UNEA Resolution 5/14.
[3] Estimated to be at least in the tens if not hundreds of billions of dollars per year. See UNEP, "Turning off the tap – How the world can end plastic pollution and create a circular economy" (2023); OECD, "Global Plastic Outlook: Policy Scenarios to 2060" (2022).
[4] Nordic Council of Ministers, "Toward Ending Plastic Pollution by 2040" (2023); Ghana submission to INC-2; OECD submission to INC-2; CIEL submission to INC-2; Minderoo's submission to INC-2.
[5] "Zero draft text of the international legally binding instrument on plastic pollution, including in the marine environment" (UNEP/PP/INC.3/4, 4 September 2023).

sustainable feedstocks, delivery models or materials; and by reducing demand for, and production of, primary fossil fuel-based plastic polymers ("primary polymers").[6]

**1.3** **Aim of our work**. To establish a fact base and to inform negotiations on the options and potential impacts of a plastic pollution Fee.

1.3.1. Scope includes (i) an exploration of the functional design choices that will determine the shape of the Fee; (ii) technical design choices that will be required to operationalise the Fee; (iii) how the Fee will interact with other policies and control measures, and (iv) a quantitative modelling-based assessment of the environmental, social and economic impacts of different potential Fee options.

1.3.2. Purpose of this paper. This Design Study on the plastic pollution Fee is published for engagement and discussion purposes. It presents options and preliminary analysis on functional design options, technical design options, and interactions with other policies and control measures. It also describes a proposed approach to the quantitative modelling.

Feedback and consultation on this Design Study will inform subsequent work towards an **Impact Study to be published in the first quarter of 2024, ahead of INC-4,** and include the results of the quantitative modelling of impacts.

1.3.3. Analytical partners and advisors.

- *Functional and technical design options*: to support the analysis we have engaged experts in international environmental and trade law and in policymaking related to the safe and environmentally sound management of plastics across the lifecycle.

- *Impact assessment:* we have engaged economists and modelling experts in environmental, social and economic outcomes of plastic policies.

- *Advisory Group:* we have convened an independent group comprised of academics, lawyers and business leaders whose role is to provide input into, and validate, the scope, approach and findings.

- *Expert Panel:* we are consulting an independent group drawn from academia to provide input to and validate the detailed modelling approach and assumptions, with a focus on the environmental, social and economic impacts of policy options.

**1.4** **Structure of this paper**:

- *Section 2* describes the potential roles of a plastic pollution Fee, and distinctive primary objectives.

- *Section 3* sets out functional design options in determining (i) the imposition of the plastic pollution Fee and (ii) the distribution of the revenues raised.

- *Section 4* explores additional technical design options relevant to the implementation of a plastic pollution Fee, including its legal character;

[6] For the Fee as a financing instrument, see Zero Draft, Section III, para 9; for the Fee as an economic instrument (i) to encourage switching, see Zero Draft footnotes 25(v), 26(v), 29 and 33; and (ii) to reduce demand for and production of primary plastic polymers, see Zero Draft, Section II. 1 (Provisions common for the Options above) and footnote 37.

administrative and governance structures; and integration within the future instrument.

- *Section 5* examines the plastic pollution Fee's relationship with other national policies and control measures, to ensure complementarity.

- *Section 6* defines representative scenarios for different primary objectives of the plastic pollution Fee. It also summarises the approach to modelling the scenarios and the comparative impacts on sustainable development (environmental, social and economic impacts).

- *Sections in the Annex* provide more detail on the design options.

# 2. Potential roles of the plastic pollution Fee

## 2.1 Two distinctive primary objectives of the plastic pollution Fee

2.1.1. Financing role. A plastic pollution Fee, to be paid by plastic polymer producers, is proposed in the Zero Draft as a potential source of financing for treaty implementation. As proposed, this Fee could provide predictable, sustainable, adequate, accessible and timely financial resources to support the implementation of the Instrument by country parties to the Instrument (Parties), particularly developing countries, Small Developing Island States (SIDS) and least developed countries.[7]

The plastic pollution Fee's primary role, in this instance, would be as an innovative financing mechanism, where the revenues generated complement "traditional" financing under the Instrument.[8] The plastic pollution Fee is innovative in terms of both:

- *Source of funds*. The plastic pollution Fee is a mandatory contribution from the private sector, whereas "traditional" funding for multilateral environmental agreements is typically in the form of voluntary or mandatory contributions from the public sector, and voluntary contributions from the private sector, civil society or other international or regional organisations; and

- *Uses of funds*. The plastic pollution Fee could complement "traditional" financing, addressing implementation costs such as financing infrastructure for the safe and environmentally sound management of plastic waste; supporting substitution to alternative safe, environmentally sound and sustainable plastic and non-plastic products, chemicals and polymers; supporting the development of reuse, refill and repair systems; addressing legacy plastic pollution; and ensuring a just transition.[9] (see section 3.2.3 for more detail.)

2.1.2. Economic instrument. Fees have also been proposed in the Zero Draft as an example of an economic instrument that can support possible control measures.[10] In addition to its financing role, a Fee on plastic polymer producers could be designed as a market-based measure to influence two types of behaviour:

- *Switching*: A Fee on plastic polymer producers could accelerate the transition from a linear to a circular plastics economy. For example, a Fee on the production of primary plastic polymers could encourage producers and users of plastic to switch to safe, environmentally sound and sustainable

[7] Zero Draft, Section III, paras 3, 4 and 9.
[8] Zero Draft, Section III, paras 1, 2 and footnote 69.
[9] See Environmental Investigation Agency, "Convention on Plastic Pollution: Essential Element: Financial Aspects" (2022). 'Traditional' financial resources are defined as Financial support to the secretariat and Financial support to developing countries and economies in transition (A. Enabling activities and B. Incremental costs).
[10] See footnote 6, above.

recycled plastic contents or alternative plastics and plastic products.

- *Demand reduction*: A Fee on plastic polymer producers could also reduce demand for plastic products, because of switching to reuse, refill and repair models; switching to non-plastic substitutes;[11] and/or increased product prices for end consumers (subject to the pass-through-rate of the Fee on prices and the price elasticity of demand).[12]

**2.2** **Complementarity across roles.** While the roles described above have distinctive primary objectives, a plastic pollution Fee may, in practice, generate complementary impacts:

- Even if the plastic pollution Fee is designed primarily as a means of implementation (financing role), the Fee may still act as an economic instrument, depending on its design (e.g., size) and market dynamics (e.g., elasticities of demand), and thereby have a secondary impact on switching and demand reduction.

- Even if the plastic pollution Fee is primarily designed as an economic instrument, the plastic pollution Fee will, in any event, act as a financing instrument, by raising revenues that could be used for treaty implementation. We assume that a portion of the Fee revenue will be redistributed to other parties, in particular developing countries, to support treaty implementation.

[11] Zero Draft, footnote 37. Any switching from plastics to non-plastic substitutes should take into account the potential for environmental, economic, social and human health impacts (see Zero Draft, Section II.6.1) and the risk of regrettable substitution (e.g., GHG impacts of switching from plastic to paper packaging).

[12] The extent to which a net reduction in total consumption of final products, notwithstanding the type of input materials or delivery model, is a desired outcome should be considered. Other policies may be more effective at reducing demand for specific plastic products (e.g., Zero Draft, Section II.3.a, "Problematic and avoidable plastic products, including short-lived and single-use plastic products").

# 3. Functional design options

## 3.1 Functional design variables, assessment of options and suggested design choices.

This section lays out a set of functional design variables for a plastic pollution Fee and describes the relevant potential options under each. These variables will by-and-large shape *what* the plastic pollution Fee looks like and reflect its ambition and potential impact. Other technical design choices, more related to *how* the Fee is implemented, are covered in Section 4.

The analysis of functional design variables is structured in two parts:

- Imposition of the plastic pollution Fee
    - Legal force
    - Entities subject to the Fee
    - Amount of the Fee
    - Geographic differentiation in the Fee
    - Modulation and exemptions
- Redistribution of revenues
    - Retained share by countries levying the Fee
    - Uses of redistributed revenues
    - Eligibility criteria for redistribution of revenues
    - Forms of funding

**"Suggested" and "open" design choices.** The aim of this paper is not to prescribe, preclude or prejudge the options, rather to invite feedback from stakeholders, to make design choices thereafter. To this end, we provide an assessment of the options based on feasibility of implementation and how they can operationalise key relevant principles, including the polluter pays principle (PPP); special priority for the special situation and needs of developing countries; and common but differentiated responsibility and respective capabilities.[13]

- For a subset of functional design variables, this results in a **suggested design choice**. In some cases, the suggested choice varies according to the intended primary role of the plastic pollution Fee. As with all parts of this report, the suggested design variables are intended to foster further discussion.
- For the remaining functional design variables, the design choice is left **open** in this paper, with the paper exploring the potential design options; in the next phase of this project, as part of the Impact Study, we will undertake a modelling exercise that will provide additional information to inform these design choices.

## 3.2 Imposition of the plastic pollution Fee

3.2.1. Legal force. The Zero Draft proposes a plastic pollution Fee as a binding requirement to finance the implementation of the Instrument. A binding

[13] Rio Declaration Principles 6, 7 and 16; see Annex, section C (Differentiation principles), below, for more details.

character is more likely to make the Fee effective and, thus, to further treaty objectives. In particular, a binding Fee results in (i) a more stable and predictable revenue stream, maximising opportunities to support full treaty implementation among all parties; and (ii) a level playing field for the private sector entities subject to the Fee.

For the latter, a binding international plastic pollution Fee avoids the risk that divergent national Fee regimes distort competitive dynamics across the supply chain or create uncertainty and complexity for industry, or the conditions for regulatory arbitrage; or that countries are reluctant to impose a Fee because it would create a competitive disadvantage for their own industry.

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***SUGGESTED DESIGN CHOICE**: a Fee should be a legally binding requirement*

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3.2.2. Entities subject to the Fee. The Zero Draft proposes a plastic pollution Fee as a means of implementation (i.e., financing role), to be paid by plastic polymer producers in their national jurisdiction where production takes place.[14] The rationale for levying the Fee at this stage in the plastics supply chain – i.e., feasibility of implementation and the polluter pays principle – is the same whether the intended role of the Fee is limited to financing or also includes an economic role:

- *Feasibility of implementation:* The plastics supply chain lends itself to a Fee imposed on upstream plastic polymer producers for efficiency and ease of administration. Economic studies suggest that a charge should be applied at the "natural choke point" in the supply chain, where the number of entities is relatively small, to reduce costs of collection and enforcement, and reduce risks that the charge is not properly collected.[15]

  Plastic polymer production is highly concentrated in terms of industry actors and found in a relatively small group of countries – with no primary polymer production located in least developed countries (LDCs) or small island developing states (SIDs).[16] Imposing the Fee further down the value chain (e.g., at the point of polymer conversion) would substantially increase the number of industry actors involved and, hence, the administrative complexity and costs[17], and the risk of non-collection.[18]

[14] Zero Draft, Section III, para 9.

[15] Roberton C. Williams III, "Environmental Taxation" (2016) *National Bureau of Economic Research Working Paper 22303* (available here, last accessed 8 October 2023), p. 14. See also, Erin T. Mansur, "Upstream versus Downstream Implementation of Climate Policy" in Don Fullerton and Catherine Wolfram (eds.) *The Design and Implementation of U.S. Climate Policy* (2012), pp. 179-193.

[16] For example, 100 producers account for almost 90% of all polymers bound for single-use plastics. These producers are concentrated in Brazil, China, the EU, India, Indonesia, Iran, Japan, Malaysia, Mexico, Russia, Saudi Arabia, South Korea, Taiwan, Thailand, Turkey, the UK, the US, and Vietnam. Dominic Charles, Laurent Kimman, and Nakul Saran, "Plastic Waste Makers Index" (2021), Minderoo Foundation (available here, last accessed 8 October 2023).

[17] See, Don Fullerton, Andrew Leicester, and Stephen Smith, "Environmental Taxes" (2008), National Bureau of Economic Research Working Paper 14197 (available here, last accessed 8 October 2023).

[18] As argued in the context of a fee or tax for the sound management of chemicals by CIEL and IPEN. *See e.g.*, CIEL and IPEN, "Financing the Sound Management of Chemicals Beyond 2020: Options for a Coordinated Tax" (2020), (available here, last accessed 8 October 2023).

- *Polluter pays principle (PPP):* Levying the Fee on upstream plastic polymer producers implements the polluter pays principle. This well-established principle of international environmental law[19] holds that a party which is responsible for pollution should bear the environmental and social costs of that pollution. Under the traditional approach to environmental charges, in line with the PPP, the market's failure to impose the environmental and social costs of pollution on producers can be corrected by imposing a Fee on the producers. In the case of plastics, polymer producers are at the top of the plastics value chain and are the ultimate source of all plastics causing pollution.[20]

Levying the Fee on polymer producers may also have some disadvantages. A polymer Fee would not be able to effectively distinguish different pollution costs among downstream products (see section 3.2.4, below). Nonetheless, a "flat" Fee on plastic polymer producers can account, in average terms, for pollution costs. Moreover, a plastic pollution Fee could also be complemented, at national level, by other taxes and charges on specific, problematic downstream products (see sections 5.1 and 5.2, below).[21]

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***SUGGESTED DESIGN CHOICE**: a Fee should be levied on plastic polymer producers*

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3.2.3. Amount of Fee. The amount of the Fee should be informed by the primary role of the Fee as a contribution to ending plastic pollution under the Instrument.

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***SUGGESTED DESIGN CHOICES:***

- Where the primary role is as a **financing instrument** to raise revenues to fund treaty implementation for developing countries, the Fee should be calibrated to ensure the amount of the revenue collected is sufficient at least to meet the costs that the Fee intends to cover (to meet the needs of recipient countries; see section 3.2.2-3, below).

  As those costs (e.g., developing safe and environmentally sound waste management) may evolve, and hopefully decline, over time, the level of the Fee may likewise evolve and decline. To facilitate the establishment of the Fee, the plastic pollution Fee could also be phased-in, starting with a lower Fee at first.

  The size of the Fee could also depend on the proportion of funds retained (to meet the needs of producer countries; see also 3.3.1 below) versus redistributed, which should prioritise fairness and equity in revenue

[19] See Rio Declaration Principle 16.
[20] As monomers are not a type of plastics themselves, a fee on monomer production would be a fossil fuel fee in essence. Polymers are, therefore, the first "unit" of the plastics supply chain, and a fee on polymers targets the unit source of all plastic pollution. Some forms of pollution are more directly attributable to the polymer production phase, others are more indirectly attributable and depend on the use to which their polymers are put, any subsequent additives applied, and the quality of the waste management system in the countries where the plastic items are eventually discarded. However, polymers are the ultimate source of all plastics causing pollution.
[21] See section 5 (Relationship with EPR systems and national plastic taxes), below.

allocation among all stakeholders.[22] The balance between retained and redistributed shares could also be designed to evolve over time.

- Where the primary role is as an **economic instrument**, for example, to encourage switching, the level of the Fee should consider market dynamics so that it will, in econometric terms, generate the desired shift in behaviour.

  The capacity of the Fee to induce switching to safe, environmentally sound and sustainable recycled plastic contents, or alternative plastics and plastic products, will depend on the responsiveness of demand to relative changes in the price of different types of plastic polymers. For example, today, the production of recycled polymers from plastic waste has a cost and price disadvantage compared to primary plastic polymer production.[23] Switching behaviour will also depend on a set of constraints that will limit the rate of substitution, such as comparative material quality/performance, safety, technology readiness, convenience and availability or lead-time in increasing supply (see also section 6.3.3, below).

  The Fee may also reduce overall demand for plastic products, as a result of (i) switching to reuse, refill and repair models; (ii) switching to non-plastic substitutes; and/or (iii) increased product prices for end consumers (subject to the pass-through-rate of the Fee on prices and the price elasticity of demand).

  Switching is likely weaker and less observable at the product level – i.e., switching to reuse models and non-plastic substitutes, where polymer costs are only a proportion (often small) of the overall product cost/price; as compared to switching at polymer-level – i.e., switching from primary polymers to recycled or alternative plastics (see above), where cost/prices are directly comparable.

  The capacity of the Fee to reduce end consumer demand as a result of increased product prices will depend on market dynamics (elasticities of demand). It is possible, if demand is relatively inelastic (i.e., demand is not responsive to changes in price), that only a very high Fee could shift such demand or, indeed, that a Fee would be unlikely to shift such demand at all (see section 6.3.2, below).

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3.2.4. Geographic differentiation in the Fee. The amount of the Fee could be differentiated, with a lower Fee imposed on plastic polymer producers in developing countries than that imposed on producers in developed countries.[24] A lower Fee could diminish the impact of the Fee on economic development.

However, a differentiated Fee compromises the competitive level playing field for producers across the globe and creates a risk of companies moving production to countries charging lower fees – a "race to the bottom" that could ultimately reduce the effectiveness of the Fee. In addition, there are other ways to ensure differentiation in favour of, and potentially among, developing

[22] As proposed in Zero Draft, Section III, paras 2-4.
[23] Dominic Charles and Laurent Kimman, "Plastic Waste Makers Index 2023" (2023), Minderoo Foundation (available here, last accessed 8 October 2023). Part of the issue are the subsidies stimulating primary plastic production.
[24] See Annex, section C (Differentiation principles), below.

countries, such as, by redistributing a relatively larger share of, or the entire, Fee revenues to developing country parties (see section 3.3.1-2, below).

***SUGGESTED DESIGN CHOICE**: a Fee should be uniform across geographies*

3.2.5. Modulation and exemptions. Assuming the plastic pollution Fee is levied on polymer production, there are design options as to which polymers incur the charge. Modulation or exemption would entail imposing a lower (or no) Fee on polymers that have lower (external) pollution costs or are otherwise more sustainable in terms of their environmental impacts.[25] Charges are frequently eco-modulated under national taxation policies and Extended Producer Responsibility (EPR) schemes, because they encourage the use of environmentally sound materials in plastics production.[26]

In the Annex (Section A.5), we discuss different approaches to eco-modulation and exemptions; that is, differentiation based on (i) feedstock and polymer production; (ii) safety and polymer use; (iii) end-of-life treatment and polymer disposal. A sophisticated system of eco-modulation – considering all three factors on a polymer-by-polymer basis – could be theoretically preferable. However, such an approach would introduce a high degree of complexity and uncertainty in both execution and measurement.

***SUGGESTED DESIGN CHOICE:***

It is suggested that an initial Fee design defines an approved list of "sustainable" polymers that are exempted from the Fee – with the main target of the Fee being primary plastic polymers.

If the primary or secondary role of the Fee is to induce switching (in addition to a financing role), exclusion of "sustainable" polymers would help in inducing switching from primary to "sustainable" polymers, such as environmentally sound and sustainable recycled polymers.

Sustainable polymers that may be exempted from the Fee could include, for instance, recycled polymers meeting sustainability criteria (e.g., for toxicity, for plastic-to-plastic yield, and for GHG emissions intensity); and biopolymers meeting sustainability criteria (e.g., for GHG emissions intensity, for land use, for biodegradability in a marine environment, and harmonisation with existing recycling systems).

This approach also minimises the risk of regrettable substitution were fees to be modulated between different primary plastic polymers. To encourage switching (e.g., to safe, environmentally sound and sustainable recycled polymers), the Fee level could reflect different costs and prices of primary plastic polymers versus their respective secondary recycled polymers.[27] However, eco-modulation on this basis, which places a higher Fee on one primary polymer, may have the unintended consequence of

[25] David Powell et all, "The Price Is Right. or is it? The Case for Taxing Plastic" (September 2018), p. 11.
[26] Nick Voulvoulis and Richard Kirkman, "Shaping the circular economy: taxing the use of virgin resources" (2019), Imperial College London White Paper (available here, last accessed 8 October 2023), p. 2.
[27] Noting the point made, above, that for many polymers there is significant heterogeneity in the final plastic application in which they are used, making these comparisons more challenging.

encouraging switching to another primary polymer rather than to recycled polymer production.

The exclusion of some polymers from the Fee may also be justified by practical considerations. For example, in contrast to primary polymer production, which is highly concentrated (about 300 actors globally[28]), the production of recycled polymers is highly fragmented, with mostly small scale, local actors, and for various uses in closed and open loops; and the production of biopolymers mostly precommercial in scale. Including these producers in the Fee base (based on eco-modulation criteria) would significantly increase the complexity of implementation for relatively little expansion in revenues or impact on the overall objectives of the Instrument. This could be subject to review as the market expands/develops – especially if one of the intended roles of the Fee is to reduce overall production, the exemption of biopolymers could be problematic in the longer term.

### 3.3 Distribution of revenues

Countries producing plastic polymers could retain part of the revenue resulting from the collection of the Fee (retained share) and the remaining revenue would be redistributed among eligible parties (redistributed share). The retained share ensures that, at a minimum, plastic polymer producing countries are compensated for the costs of collecting the Fee, while the redistributed share ensures that the plastic pollution Fee operates as a financing instrument, as foreseen in Zero Draft.

3.3.1. Retained share by countries levying the Fee. Plastic polymer producing countries could retain a portion of the revenues collected by the Fee. The retained share could be calculated as follows:

- *Fee collection costs (plus a mark-up)*: The retained share (i) should, at a minimum, cover the costs of collection of the Fee, and (ii) could, in addition, include a mark-up to incentivise collection; and participation by polymer producer countries. As collection costs may differ across polymer producing countries (e.g., higher costs for developing countries), the retained share based on collection costs may differ too. The collection costs may also change over time.

- Next, the question arises of whether the retained share should go beyond the collection costs (plus a mark-up). This is especially relevant if the primary objective of the Fee is as an economic instrument, which may entail a higherlevel Fee and higher revenues. There are two options:

    - *Option 1*: allow producer countries to retain a higher retained share, beyond collection costs (plus a mark-up), which they could use to cover the costs of the Instrument's implementation. Retained revenues could be applied to the public purse or earmarked for addressing plastic pollution. Retained shares could be differentiated between producer countries to reflect different stages of development. Arguably, under this option, the portion of the retained shares going beyond collection

[28] See Dominic Charles and Laurent Kimman, "Plastic Waste Makers Index 2023" (2023), Minderoo Foundation (available here, last accessed 8 October 2023).

costs would be deducted from any amount that the country could obtain from the pot of redistributed revenue.

- *Option 2*: do <u>not</u> allow producer countries to retain a higher retained share, beyond collection costs (plus a mark-up). Under this option, the producer country would, like any other non-producer party, be eligible to receive funding from the pot of redistributed revenue, assuming the country meets the eligibility criteria for such funding (see below). Under this option, the funding resulting from the Fee that is allocated to producer countries will also be differentiated to reflect different stages of development, because of the eligibility criteria for the allocation of redistributed revenue (see below 3.3.3).

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***SUGGESTED DESIGN CHOICE:*** *open for discussion by stakeholders*

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3.3.2. <u>Uses of redistributed revenues.</u> The resources generated by the Fee would add a unique and novel source of funding to the traditional sources of funding for the Instrument, as the Fee would involve a mandatory contribution from the private sector (i.e., plastic polymer producers).

The revenue redistributed from the Fee will complement funding from traditional sources under the Instrument and help to ensure full implementation. A decision will have to be made as to which specific aspects of the Instrument's implementation would be covered by the redistributed revenues. Two options are available, with potential for a hybrid of the two:

- *Distinctive uses of funds.* The Fee could exist alongside but separate from traditional funding sources under the Instrument in terms of allocation of funds. While the traditional sources could cover, as they routinely do, the costs of more traditional areas of treaty implementation,[29] the Fee could focus on some of the more costly and unique costs associated with ending plastic pollution. Hence, the Fee could, for example, cover the costs of the Instrument's implementation related to[30]:
    - the development and maintenance of safe and environmentally sound waste management infrastructure[31]
    - supporting the development of reuse, refill and repair systems[32]
    - supporting substitution to alternative safe, environmentally sound and sustainable plastic and non-plastic products, chemicals and polymers[33]

[29] Traditional areas of treaty funding include operational costs, program costs, research and development costs, incremental costs, financial assistance, technical assistance, capacity building and education. See Annex, section B (Use and administration of the Fee revenues), below.
[30] For estimates on the size of costs see UNEP, "Turning off the tap – How the world can end plastic pollution and create a circular economy" (2023).
[31] Zero Draft, Section II.9, and footnote 74. Zero Draft proposes to require Parties "to take effective measures to ensure that plastic waste is managed in a safe and environmentally sound manner throughout its different stages, including handling, collection, transportation, storage, recycling and final disposal, taking into account the waste hierarchy"; and to prohibit certain waste management practices, namely "open dumping, ocean dumping, littering and open burning" (Part II.9.a, Option 1, para 1 and "Provisions common for Options above").
[32] Zero Draft, Section II.5.b.
[33] Zero Draft, Section II.5.c,d and Part II.6.

- addressing legacy plastic waste[34]
- ensuring a just transition for affected populations.[35]

- *Pooled uses of funds.* The Fee could be pooled with traditional sources of funding allocation, with one single pot of funding available to cover both traditional areas covered by treaty funding, and novel areas specific to the challenges of ending plastic pollution.

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***SUGGESTED DESIGN CHOICE:*** *Open for discussion by stakeholders*

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3.3.3. Eligibility for redistributed revenues: The redistributed share will be allocated among Parties to the Instrument based on eligibility criteria and will take into account the need for differentiation among parties in favour of developing countries.[36]

- The allocation could be based on the needs of each party to secure funding for costs related to the challenge of ending plastic pollution (that is, for example, the development and maintenance of safe and environmentally sound waste management infrastructure; supporting substitution to alternative safe, environmentally sound and sustainable plastic and non-plastic products, chemicals and polymers; supporting the development of reuse, refill and repair systems; addressing legacy plastic waste; and ensuring a just transition). This needs-based allocation will ensure a level playing field among parties (giving each party the ability to develop, for instance, the waste management infrastructure), while, at the same time, resulting in a higher share for developing country parties (because they have the highest needs for funding the costs at issue).

- In addition, further eligibility criteria could be applied. Funding could be restricted to eligible countries, using an allocation formula to select recipients (e.g., developing countries, as opposed to developed countries) or differentiated further among parties based on their development status (SIDS, LDCs and other developing countries).

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***SUGGESTED DESIGN CHOICE:*** *open for discussion by stakeholders*

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3.3.4. Forms of funding. The Fee revenue could be distributed based on grants and co-financing. Learning from the Green Climate Fund's (GCF) approach, offering financing and co-financing opportunities enables collaboration with (mainstream) private finance and leverages additional resources for impactful projects.

Similar mechanisms could apply to the plastic pollution Fee by co-financing higher risk (innovative) industries that will build the infrastructure required (to implement the Instrument's objectives), initiating blended and concessional

[34] Zero Draft, Section II.11, and footnotes 72, 74.
[35] Zero Draft, Section II.12.
[36] See Annex, section C (Differentiation principles), below.

finance and de-risking mechanisms. The current barriers to risk-adjusted returns being sufficient to attract private capital include (i) higher risk technologies and business models, (ii) lack of economic and financial viability of required solutions, especially due to harmful subsidies, (iii) lack of incorporation of externalities cost in financing/investment decisions, (iv) long term horizon requiring patient capital. Mobilizing financial resources from all sources, including from private sources, will be key to the success of the Instrument. Especially, it will be crucial to redirect financial flows along the plastics value chain, including private financial flows, away from primary plastic polymers towards circular economy solutions.

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***SUGGESTED DESIGN CHOICE:*** *open for discussion by stakeholders*

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# 4. Technical design options

This section explores additional technical considerations relevant to the implementation of a plastic pollution Fee, including its legal character, administrative and governance structures, and integration within the future instrument. See Annex for more details.

## 4.1 Design of the Fee collection mechanism

4.1.1. Legal character of the Fee. A fiscal charge can come in the form of a fee or a tax, with the difference depending on the intended uses of the revenues. A fee is imposed to cover specific costs, typically the provision of services, and generates revenues to cover these costs. A tax, on the other hand, is imposed as part of the general fiscal burden, with revenues falling within the general public purse.[37] In the case of a fiscal charge intended to contribute to ending plastic pollution, the charge would properly be designated as a fee intended to provide revenues to meet pollution costs.[38]

A key question regarding the imposition of a fiscal charge is the basis on which the charge is levied. A Fee could be levied based on a specific (i.e., per unit) or *ad valorem* (relative to value) basis. For the time being, a specific charge based on the weight of production would seem more appropriate. The weight of production relates to resulting plastic pollution and the need for it to be managed, and it is more likely to generate a predictable stream of revenues than an *ad valorem* charge.

4.1.2. Procedures for collection. National authorities of the country of production could impose, collect and enforce the Fee.[39] This is in line with the principle of sovereignty under international law, under which national authorities are responsible for imposing and collecting fiscal charges within their territory. The procedures for the collection and enforcement of the Fee could also be aligned with the procedures relating to other fiscal and regulatory measures that apply to polymer producers, again enhancing administrative efficiency.

4.1.3. Transparency and monitoring. While the Fee should be collected by national authorities of the country of production, an international entity is suited to oversee transparency obligations and should be responsible for the monitoring of the Fee. These aspects of Fee implementation would dovetail with the general transparency and monitoring obligations in the treaty.

In terms of reporting, producing Parties (polymer producing countries party to the Instrument) should be expected to report on polymer production by its producers. Aggregate data could be reported publicly, with company-specific data reported on a confidential basis. Producing Parties should also report on: their collection and enforcement activities, including the total revenues raised and any difficulties encountered with collection and enforcement; the amount of the retained revenues; and the amount of the redistributed revenues transferred

[37] See for the distinction between taxes and other charges under US and Indian law: Hugh D. Spitzer, "Taxes vs. Fees: A Curious Confusion" (2002) 38(2) *Gonzaga Law Review* 335; Bharat Ji Agrawal, "Difference between Tax & Fee and Guidelines for Drafting of Fiscal Legislation" (2001), 17 *Judicial Training & Research Institute Journal*, p. 42.
[38] Other INC proposals refer to the proposed charge as a "fee" rather than a "tax" for similar purposes. For instance, in its INC-2 submission, Ghana proposed a Global Plastics Pollution Fee.
[39] Zero Draft, Section III.9.

to the international entity (or entities) responsible managing the redistributed revenues (see next section).

### 4.2 Administration and governance of revenue redistribution

4.2.1. Financial mechanism. The establishment of a Fee would require a mechanism to allocate the redistributed revenues generated by the Fee. The mechanism's relationship to other sources of funding (see section 3.2.2, above) and their own institutional structure would be key. This involves the question of whether sources of financing are integrated or independent, and what entity, or entities, would be responsible for administering redistributed revenues.[40]

In part, the answers will turn on the amount of the redistributed revenues and the purposes for which they can be used. The higher the available amount, and the larger the number of uses, the stronger the justification for considering more than one entity. In particular, responsibility for implementing different uses could be given to different entities. Entities could be global or regional, public or private, existing or new.

A starting point should be a good understanding of existing international mechanisms to address environmental funding.

- *Integration approach.*[41] Initially, the predominant approach for global financing mechanisms involved the establishment of funding arrangements that are integrated into existing international institutions and agreements.[42] The Zero Draft suggests that a fund could be established within an existing fund, such as the Global Environment Facility (GEF).

- *Independent approach*.[43] Over time, a shift has been observed towards the creation of new, independent organisations to manage financial resources for global initiatives.[44] This new generation of financing arrangements sought to establish autonomous entities, which are dedicated solely to the funding and execution of specific global goals.[45] These independent organisations have governance structures that are entirely separate from existing institutions. They are intended to ensure better focus on the funding goals and avoid influence from existing institutions with other responsibilities.

- *Hybrid approach.* Some initiatives have been based on a middle way, with the creation of specialised financial entities within the framework of existing organisations. For instance, the Global Fund (GF) and Green Climate Fund (GCF) use the financial management services of the World Bank. A variation on this approach would be to use the services of regional development

[40] Zero Draft, Section III.4.
[41] Zero Draft, Section III. 6 (Option 1).
[42] For example, the trust funds administered by the World Bank Group, such as the Global Facility to Decarbonize Transport Multi-Donor Trust Fund or the Climate Support Facility. For a full list see here (last accessed 8 October 2023); Sophie Smyth and Anna Triponel, "Funding Global Health" (June 2013), *Health and Human Rights* 15, no. 1, pp. 58-70; this option has also been considered by Co-facilitators' summary of UNEP Contact Group 2, see here (last accessed 8 October 2023).
[43] Zero Draft, Section III.8 (Option 2).
[44] Sophie Smyth and Anna Triponel, "Funding Global Health," Health and Human Rights 15, no. 1 (June 2013), pp. 58-70.
[45] For example, the Global Alliance Vaccine Initiative Foundation (GAVI Foundation), the Global Fund to Fight HIV Aids, Malaria and Tuberculosis (GAVI) and the Green Climate Fund (GCF) were established or transformed into autonomous entities. See Sophie Smyth, "Agency and Accountability in Multilateral Development Finance: An Agenda for Change" (2012), 4 L. & DEV. REV. 65, *Temple University Legal Studies Research Paper No. 2012-35*; The Global Fund, "Report of the Executive Director" (GF/B19/3, 2009), available here (last accessed 8 October 2023); Abrar Chaudhury, "Role of Intermediaries in Shaping Climate Finance in Developing Countries—Lessons from the Green Climate Fund" (2020), *Sustainability* 12, no. 14, p. 5507.

banks to the extent that it is deemed too desirable to have the Fee administered regionally. This hybrid approach avoids the need to create entirely new financial management systems from scratch. It allows existing expertise and resources to be used, while tailoring the initiatives to specific objectives.

4.2.2. Allocation mechanism. A Fee fund requires an allocation tool to be able to distribute fund revenues. Possible tools include allocation formula, application processes, competitive bidding, a qualitative assessment of needs (run by an independent technical committee and based on science), or targeted funding based on priorities without an allocation formula.

In general, allocation mechanisms offer many choices that can lead to very different allocation outcomes. In particular, the choices made in respect of pre-allocation of funds and eligibility criteria shape the allocation significantly. Therefore, the design of the allocation mechanism should be undertaken with close consideration of the objectives to ensure appropriate outcomes.

4.2.3. Modes of implementation. Funding mechanisms can choose different implementation modes to execute funding. Two common options are as follows:

- *Implementing Agencies.* In this approach, international funding mechanisms, such as the Global Environment Facility (GEF), partner with specialised organisations to manage and execute projects on their behalf. These organisations are "implementing agencies" that have expertise in various sectors, such as environmental conservation, sustainable development and climate change adaptation.

- *Direct Access.* Direct access allows recipient countries to directly access funding and manage projects themselves, bypassing intermediaries. International mechanisms, such as the Green Climate Fund (GCF), empower countries to develop and implement projects that align with their own priorities and capacities. For instance, GCF's direct access modality enables national designated authorities or accredited entities within recipient countries to propose and manage projects.

### 4.3 Integration within the future instrument

4.3.1. Form. Zero Draft has chosen to integrate the obligation to levy a plastic pollution Fee into the treaty, with details to be developed by the governing body. This prioritises broad participation and binding legal force.

Parties might seek to establish mechanisms that would allow aspects of the Fee to evolve over time. Fee requirements could be integrated into a treaty annex subject to a regular review and amendment process. Some aspects that could evolve over time include: the Fee administration scheme; the level of the Fee; oversight of the Fee mechanism; the relative retained and redistributed shares; priorities and guidelines for the use of the redistributed revenues; criteria for the allocation of revenues; and review and monitoring of compliance.

4.3.2. Role of the Conference of the Parties (COP). An international entity is suited to oversee transparency obligations and should be responsible for monitoring the

Fee. The most obvious candidate is the COP.[46] These aspects of Fee implementation would dovetail with the general transparency and monitoring obligations in the treaty.

Parties may also consider giving the COP responsibility for considering how aspects of the Fee mechanism would evolve over time, with COP decisions being either binding or non-binding.

4.3.3. Prevention of free riding in limited ratification scenarios. As part of their assessment of a Fee mechanism, parties might also seek to consider options for addressing the risk of "free-riding", which arises if only a subset of countries producing plastic polymers agree to impose the Fee.[47] In that scenario, the producers of plastic polymers in other "non-Fee-imposing" countries would not be subject to the Fee. This would mean that these producers in these countries would not contribute, under the treaty, to addressing pollution costs caused by their products. This uneven imposition of the Fee would confer a competitive advantage on producers in non-Fee-imposing countries by making their production of plastics less costly – they would free-ride on the Fee paid by their competitors. The possibility of avoiding the Fee, and gaining a competitive advantage, if not countered, might convince some producing countries to reject a treaty that includes the Fee.[48]

To counter the possibility of free-riding, treaty Parties could impose a border adjustment or other border charge to require importers of plastics and plastic products from non-Fee-imposing countries to pay an import duty equivalent to the Fee. Countries that are party to the Instrument[49] could impose a border adjustment or other border charge to counter the benefits of free-riding by "non-Fee-imposing" countries. In legal terms, such a border measure would need to be acceptable under World Trade Organization (WTO) rules. But there is a clear pathway for ensuring consistency with WTO rules, related to the rules on border adjustments and to the justification for measures pursuing health and environmental objectives.[50]

[46] Or alternative "*governing body*" as referred to in the Zero Draft.
[47] This could occur if the Fee requirements are ratified by only a subset of polymer producing countries (assuming this option is available; see Annex, section D (Treaty integration), below); or if certain polymer producing countries did not ratify the treaty at all.
[48] The extent of the incentive to free-ride would likely depend on the amount of the Fee. A higher level of Fee is more likely to prompt an incentive to escape the charge.
[49] In non-Fee-imposing countries, and other non-Parties, it would not be possible to counter the benefits of escaping the Fee by non-Fee-imposing countries. In those markets, producers of plastic polymers in non-Fee-imposing countries would enjoy a competitive advantage, as compared with producers of plastic polymers in Fee-imposing countries.
[50] For more detail, see Annex, section D (Treaty integration), below.

# 5. Relationship with EPR systems and national plastic taxes

This section considers how a Fee would interact, complementarily or otherwise, with relevant existing national policies and with other relevant control measures proposed in the Zero Draft.

## 5.1 Extended Producer Responsibility (EPR)

The Zero Draft includes provisions for both EPR (in Part II.7) and the plastic pollution Fee (in Part III.9 on financing mechanisms). In the Annex (Section A.8, below), we explain that EPR and the plastic pollution Fee are distinctive and independent instruments. However, while EPR and the Fee are distinctive and independent, there is significant potential for them to work in ways that would be mutually reinforcing and help accelerate the transition to plastics circularity.

- The Fee could provide financing to support the development of appropriate infrastructure for managing plastics at end of life. While EPR fees would cover the costs of collection (once the facilities are up and running), as well as sorting and treatment of end-of-life plastics in such facilities (and those costs would themselves be set so as to cover both capital and ongoing costs, plus the costs of financing the facility), EPR schemes themselves are not always well placed to co-ordinate or fund the development of such infrastructure.

- While the Instrument should outline the principles of a well-designed EPR (and ideally minimum requirements), enforcing this may be a challenge. Investment in facilities and infrastructure from revenues raised by the Fee could thus act as a "carrot" through being conditional on the relevant EPR schemes meeting certain minimum requirements.

- By helping to ensure a reliable counter-party – in the form of a well-functioning EPR scheme – and providing capital, the Fee would serve to de-risk infrastructure investments and likely leverage additional private finance for EPR systems. Leveraging additional finance will be important given that some facilities may deal with multiple materials (beyond plastics).

- By taking a global perspective, administration of revenues raised by the Fee could play a coordinating role in supporting the development of appropriate infrastructure at an appropriate spatial (which may be regional, rather than national) while also reducing the risk of stranded assets. The Fee could provide financing to support the development of appropriate infrastructure for managing plastics at end of life.

## 5.2 National plastic taxes

Weaknesses of national plastic taxes

- Not all countries maintain such taxes, and for those who do, there are wide variations in the structure.[51] Furthermore, the stage of imposition, product scope and amount of the charge differs across jurisdictions.

- National taxes typically have limited product scope; they are usually imposed on final products, with some exceptions where they are imposed on polymer production.

[51] For instance, while Ghana maintains an *ad valorem* plastics tax, most other jurisdictions, such as Estonia, Netherlands, Spain, and the UK, rely on a specific tax.

- National plastic taxes are regressive in nature. The charge levied on consumers is uniform, thus it most negatively impacts consumers of the lowest income group.

- National taxes cover only a portion of the in-country costs of pollution. Frequently, the tax rate is calculated from the amount of revenue the government aims to raise and is, therefore, not proportionate to the costs of tackling plastic pollution.

- Revenues feed into the national budget and are not necessarily used for tackling plastics pollution, nor financing recycling infrastructures and reuse systems.

- National taxes are administrative burdensome, requiring border tax adjustments on imports and exports; they can be seen as unfair to national producers by putting them at a cost disadvantage.

<u>Comparative advantages of a Fee on polymer producers</u>

- Uniformity of requirements across jurisdictions (subject to differentiations of Fee amount collected/redistributed); levels the playing field for producers.

- Broad product scope, covering polymers and, hence, all plastics.

- The retained share of revenues can be used to cover in-country pollution costs, whereas the redistributed share also covers international pollution costs.

# 6. Approach to modelling scenarios and impacts

*This section provides a non-technical overview of the suggested approach and key analytical questions the modelling seeks to answer in the second phase of the project – the Impact Study (to be published in the first quarter of 2024). We, therefore, explicitly welcome recommendations for potential improvements in data sources and methodology, and on the scenarios and design choices proposed below. The Impact Study will model certain scenarios, based on design choices, to test how the Fee can contribute to ending plastic pollution (as an innovative means of financing Instrument implementation, to affect switching to alternative plastic products and to reduce overall demand for plastic products). The Impact Study will also allow policymakers and other stakeholders to consider the impact of other scenarios, based on different design choices for the Fee.*

## 6.1 Scenarios and core design assumptions.

We propose to model scenarios for the Fee that represent both distinct primary roles of the Fee, described above (see section 2, above), as a **financing instrument** and as an **economic instrument**.

Nine core design choices are described above (see section 3, above). For modelling purposes, we will propose a design choice for each variable. Where necessary, we will make different assumptions in each of the scenarios, to be consistent with the distinctive primary role for the Fee being represented.

We propose the following assumptions:

**IMPOSITION OF THE FEE**

(i) **Legal force.** Consistent with the suggested design choice, we might assume a binding commitment. We might also assume – for purposes of initial modelling – that the Instrument and the Fee are universally ratified and implemented. This assumption is constant across scenarios.

(ii) **Entities subject to the Fee**. Consistent with the suggested design choice, we might assume the Fee is levied on polymer production in the country of operation. This assumption is constant across scenarios.

(iii) **Size of Fee.** Consistent with the suggested design choice, this assumption varies between the different primary roles for the Fee.

- **Financing instrument.** The Fee could be set at a level to meet the resource needs of eligible recipient countries (as defined below), to implement an ambitious treaty outcome (e.g., the Global Rules Scenario proposed by the Nordic Council of Ministers).

  *Initial hypothesis is to model a Fee level in the range of US$50-250 per tonne; potentially ramping up from a lower level in the initial years and ramping down in the later years.*

- **Economic instrument.** The Fee could be set at a level that will generate a significant shift in market behaviour, switching from primary plastic polymer production to production of recycled and sustainable biopolymers (meeting the criteria defined above). The Fee may also influence additional switching behaviour to reuse, refill and repair models and to non-plastic substitutes, and a reduction in end consumer demand as a result of higher prices.

*Initial hypothesis is to model (i) a Fee level in the range of US$500-1,000 per tonne; and (ii) a higher Fee level in the range of US$1,000-2,000 per tonne; potentially ramping up from a lower level in the initial years and ramping down in the later years.*[52]

(iv) **Uniform or differentiated Fee.** Consistent with the suggested design choice, we could assume the Fee is uniform across all producing countries.

(v) **Modulation and exemptions.** Consistent with the suggested design choice, we propose to model exemptions from the Fee for recycled polymers meeting sustainability criteria (e.g., for safety, plastic-to-plastic yield, GHG emissions intensity) and biopolymers meeting sustainability criteria (e.g., GHG emissions intensity, biodegradability in a marine environment).

**REDISTRIBUTION OF REVENUES**

(i) **Retained share by countries levying the Fee.** We propose to model two hypotheses for each of the scenarios representing different roles of the Fee (financing instrument and economic instrument):

- The retained share covers only the costs of collection of the Fee, and a mark-up to incentivise collection. *Initial hypothesis is that the retained share will be less than 10 per cent of Fee revenue.*
- The retained share covers more than collection costs (plus a mark-up), which plastic polymer producing countries could use to cover the costs of treaty implementation. *Initial hypothesis is that retained share is more than 50 per cent of Fee revenue.*

(ii) **Uses of redistributed revenues.** Building on section 3.2.2, for illustrative modelling purposes we could assume the Fee focuses on some of the more costly and unique costs associated with ending plastic pollution and the Instrument's implementation. Specifically, we will assume redistributed revenues can support capital and operating costs of:

- The development and maintenance of safe and environmentally sound waste management infrastructure (collection and sorting, recycling, residual waste management).
- Supporting the development of reuse, refill and repair systems.
- Supporting substitution to alternative safe, environmentally sound and sustainable plastic, and non-plastic products, chemicals and polymers.
- Addressing legacy plastic waste.
- Ensuring a just transition for affected populations.

To simplify the comparison across scenarios, we could assume the types of costs covered in the redistribution of revenues is constant across scenarios. This will allow a focus on the incremental impacts across the scenarios as the

[52] Hypotheses informed by the modelling of plastic taxes in OECD, "Global Plastic Outlook: Policy Scenarios to 2060" (2022) and of a plastic fee in Nordic Council of Ministers, "Toward Ending Plastic Pollution by 2040" (2023)

primary role for the Fee changes from financing to economic instrument (e.g., the incremental effects of a higher Fee on polymer production required to induce significant switching), rather than on differences in scope of redistributed revenues.

(iii) **Eligibility criteria for redistributed revenue.** For illustrative modelling purposes only, we could assume all low-income and lower-middle-income countries (as defined by the World Bank) are equally eligible and the only countries eligible. Again, this will allow a focus on the incremental impacts across the scenarios as the primary role for the Fee changes, rather than on differences in scope of redistributed revenues.

(iv) **Forms of funding.** We could model revenue redistribution in the form of both grants (e.g., to finance activities where there is no business case) and co-financing (e.g., to illustrate the potential for the Fee to de-risk business cases, unlocking private capital and blended finance opportunities).

### 6.2 Context for the modelling approach: possible impacts of the Fee

We aim at modelling the impact of the plastic pollution fee on all three aspects of sustainable development (environment, social, and economic):

(i) Environment. While there are a wide range of potential environmental impacts from plastics across their lifecycle (e.g., chemical toxicity), the model will consider two main types of environmental impacts. First, the volumes of plastic from primary polymer production through to their end-of-life fates in controlled disposal or mismanaged waste (open burning, leakage into the environment), and, second, greenhouse gas emissions.

As a financing instrument, the Fee can play an important role in reducing volumes of mismanaged plastic waste (e.g., open burning or leakage into the environment), through, for example, funding the expansion of waste management infrastructure in developing countries.

As an economic instrument, the Fee may also encourage the switch from primary plastic polymers to less environmentally harmful alternatives. For example, if recycled plastics become more cost competitive, a shift from primary to recycled materials could reduce greenhouse gas emissions.

Finally, a very high Fee level may reduce end consumer demand in the economy as a whole.

(ii) Social. The model will consider three main social impacts of the Fee: jobs, affordability/cost of living and health.

The model will estimate job impacts for each region across the value chain from the production of plastics or its substitutes (including reuse systems) through to their collection, recycling and end of life management. These will be based on current jobs data and expected evolution based on the jobs per tonne of "plastic utility" each of these different steps requires. We are aiming to provide an indication of skill levels / income of different job types but this may be unfeasible due to data limitations.

The Fee may directly affect the cost to the end consumer of goods containing plastics. While plastics are relatively cheap and abundant, in developing countries they are also critical to allow affordable access to many essential goods. Without plastic water bottles or sachets, affected individuals may lack access to safe drinking water or hygiene products. As such essential goods use a large share of the income of low-income households, it is important to assess the potential impact of different Fee levels on these households. While consumer goods firms may choose to not pass on the full costs of the levy in the lowest income countries, a higher Fee is generally expected to result in more significant price rises. One approach to remedy this could be that a Fee financing mechanism may allocate some funding towards cushioning cost of living impacts in low-income countries.

There is mounting evidence about the proven and potential human health impacts from plastics' production, use and end-of-life management (especially from chemical additives).[53] Quantifying these impacts is challenging (more than 13,000 chemicals have been identified as associated with plastics and plastic production). There is a lack of transparency about the composition of plastics, and while some 3,200 chemicals have been associated with one or more hazardous properties, most intentionally added substances have not yet been fully tested for their toxicity.[54] Health impacts are also unlikely to be linear, so estimating impacts based on plastic volumes will be difficult. In collaboration with leading scientific experts on health impacts, the project will consider which health risks and impacts can be estimated more robustly (e.g., human health impacts from open burning of mismanaged plastic waste) and which will have to be considered qualitatively.

(iii) Economic. As an economic instrument, the Fee may have varied and complex impacts across the plastics value chain. As a financing instrument, it can also be a critical source of funding for the transformation to a circular plastic economy.

There are several questions and complexities in assessing the economic impacts of the Fee.

- To what extent will polymer producers and other players along the value chain pass the Fee on to their consumers (cost-pass-through)?
- Will an increase in the price of primary plastic polymers result in a significant reduction in their demand and/or substitution (price elasticity)?
- How will the Fee impact profitability across the value chain?
- How will the costs of building and operating required infrastructure change?
- How might the Fee unlock incremental private finance?

The empirical evidence to inform these potential economic impacts is often limited. Assessing cost-pass-through requires some understanding of the competitive dynamics (market structure, production cost curves). The price elasticity of primary plastic polymers that has historically been observed (e.g., due to of fluctuations in oil prices) may not be a good proxy for the impact of a Fee that is higher than historic fluctuations and is a permanent, rather than a temporary shock. Crucially, the demand for primary plastic polymers is not only

[53] See P.J. Landrigan et al, "The Minderoo-Monaco Commission on Plastics and Human Health" (2023), *Annals of Global Health*, 89(1).
[54] UNEP, "Chemicals in Plastics – A Technical Report" (2023).

dependent on the price but also on the availability and performance of alternative solutions for a diverse range of applications. This will affect the mix of alternative industries and infrastructures that will gain market share and profit.

In general, the evidence substantiating key assumptions is stronger in modelling the impacts of a financing instrument than an economic instrument. While the confidence in assumptions for the required investments to fund implementation can be based in empirical data, the assumptions required to estimate an acceleration of the shift towards a more circular plastics economy are more complex (e.g., depending on complex trade-offs between price, safety, performance, and convenience and technological evolution). Predicting the rate at which unprecedented increases in the cost of primary plastic polymers translate into changes in purchase and investment decisions, and the economic implications of these changes (e.g., of underutilised polymer producers competing for utilisation) is even more uncertain. However, a modelling exercise based on the best available estimates enables inferences on the potential outcomes in different scenarios and offers a basis for stakeholder deliberations.

### 6.3 Overview of the model design, assumptions and uncertainties

The proposed design of the model asks six questions:

- What is the baseline demand for polymers before the Fee?
- How will demand for polymers respond to the Fee?
- How much would the Fee induce switching away from primary polymers?
- How much would the Fee reduce end consumer demand for plastic products?
- How would the plastic Fee impact primary polymer production?
- How much revenue would the plastic Fee raise?
- What would the revenues be used for?

6.3.1. What is the baseline demand for polymers before the Fee? To determine the baseline demand for each plastic application/product and geography (e.g., bottles in India) we take the estimated volume now and in 2040 from the best available sources and map it back to polymer content.[55]

6.3.2. How will demand for polymers respond to a Fee? We need to estimate the impact of a significant and sustained price shock (i.e., a Fee) on demand for primary plastic polymers. Unfortunately, historical data and precedents may not help estimate this. Historical price fluctuations have generally not resulted in a reduction in primary plastic polymer demand, suggesting inelastic demand. There may be various causes for this, including long-term price expectations (e.g., oil price shock vs. sustained rise); time lags (e.g., to invest in new infrastructure or barriers to switching processes and suppliers); and in some

[55] E.g., OECD, "Global Plastic Outlook: Policy Scenarios to 2060" (2022). This report has a 2060 time horizon. An updated Outlook with a 2040 time horizon is currently being developed.

sectors marginal share of the final product (e.g., cost of packaging as a share of product price). Learnings from other fees (e.g., on plastic bags) are also unlikely to be comparable (previously free product, Fee imposed at point of consumption).

The OECD's 'Global Plastic Outlook' is the most robust study quantifying the potential impact of taxes on plastics (and subsidies on recycled plastics).[56] The OECD ENV-Linkages Computable General Equilibrium (CGE) model describes how economic activities are inter-linked across several macroeconomic sectors and regions. It does not directly include elasticities. Given the OECD's general equilibrium model contains a large range of dynamic and non-linear interactions, including multiple policies being modelled simultaneously, it is not possible to estimate accurate elasticities for primary polymers based on model results. In the absence of better or alternative empirical data, we propose to model how demand is reduced by switching to available, cost-competitive, performance-equivalent polymers and effective reduction levers (see Chapter 6.3.3 below).

Assumption – Cost pass-through. Given that the majority of polymers relatively commoditised materials (with generally limited margins), we could assume full cost pass-through at all stages of the value chain (i.e., from producer to consumer). In reality, some actors (e.g., those with privileged access to lower cost feedstocks) may try to gain/retain market share by lowering or maintaining prices. In a future model update, we could potentially test the impact of varying cost pass-through assumptions on the results.

6.3.3. How much would the Fee induce switching away from and reduction in primary polymers? In absence of a robust estimate of the price elasticity for virgin polymers, the reduction in virgin polymer demand could be estimated for each application based on the potential uptake of a mix of possible levers – or Circular Economy (CE) alternatives:

- Switching ...
  - to secondary plastic: primary polymers replaced by suitable recycled plastic;
  - to alternative safe, environmentally sound and sustainable plastic (e.g., suitable bio-based/biodegradable polymers);
- Reduction ...
  - through elimination: use of plastic utility is eliminated entirely (e.g., by light-weighting products/application by suppliers);
  - through reuse, refill and repair schemes: reducing demand for new plastics;
  - through non-plastic substitution: plastic utility met by other material (e.g., suitable paper substitutes).

[56] OECD, "Global Plastic Outlook: Policy Scenarios to 2060" (2022).

The use of these different levers to replace primary plastic polymer demand depends on their relative price, performance, convenience and technology readiness. This is complex, and requires an application-specific approach which simulates the needs and preferences of companies and customers.

Assumption – Uptake of CE alternatives. For each plastic application (e.g., bottles), the switching and reduction levers could first be assessed based on three criteria: (1) the technological maturity; (2) performance and safety; and (3) convenience of each reduction lever (e.g., recycled plastic).

A conservative approach could be taken throughout the assessment as the lowest score among the three criteria becomes the "limiting factor" impacting broader adoption – for example, if there is no technologically ready alternative material/strategy, we would assume no reduction/substitution.

Next, if the assessment indicates some switching may occur, the score could be used to estimate switching costs in addition to the direct cost of the alternative. That is, for alternatives that are technologically mature, and match primary plastic polymers in convenience, performance and safety, switching costs could be assumed low; while they could be assumed high if some/all of these are lacking. The switching costs could be estimated as a percentage of the direct cost of the alternative, with the total cost being the sum of direct and switching costs.

Then, for each reduction lever, we might assume a maximum substitution/reduction potential in each application (e.g., the best feasible recycling rate for specific applications), based on expert estimates from previous studies.

Finally, the quantity of virgin plastic demand that is replaced by different reduction levers up to their maximum substitution/reduction potential in a given year could be estimated based on the volume of reduction levers whose total cost (direct + switching costs) are lower than the cost of virgin polymer plus the Fee (and any other cost increasing policies such as EPR for specific applications).

6.3.4. How much would the Fee reduce end consumer demand for plastic products? In addition to accelerating the uptake of alternative CE solutions to virgin plastic, the Fee may result in a direct reduction in end consumer demand for plastic products as a result of price rises (assuming cost-pass-through). For example, if PET costs $1000 per tonne and a $500 per tonne fee is applied, a PET bottle weighing 25g will increase from $0.0250 to $0.0375. This price increase may cause a reduction in demand for end-products as a proportion of consumers will be disincentivised from purchasing that product.

Empirical data points towards inelastic demand so the impact may be minor and less than the margin of error of alternative assumptions. This project will continue to investigate the available evidence and responses to this consultation to consider if and how to incorporate the potential impact on end-user demand.

6.3.5. How would the plastic Fee impact primary polymer production? The demand for primary plastic polymer within a specific plastic sector for a given region and year could be converted to polymer-level demand using a matrix of polymer share for specific applications. That is, if 50 per cent of bottles are made of PET

today, it might be assumed that 50 per cent of the volume of bottles required in future years will also be made out of PET.

Total annual demand for a given polymer can be summed up across applications and regions. The respective impacts on different producing countries can also be considered in isolation.

Assumption – Production and trade of polymers. Polymers are globally traded commodities. To translate demand for polymers into the origin of polymer production, we need to assume future shares of production and trade.

To simplify, we propose to assume that countries' global market share of polymer production (provided by energy analytics firm, Wood MacKenzie) applies in every region. E.g., if the US accounts for 20 per cent of global High Density Polyethylene (HDPE) production, we would assume that 20 per cent of HDPE consumed in the US is produced in the US, with the remainder imported from other countries according to their global market share.

6.3.6. How much revenue would the plastic Fee raise? Based on the design assumptions above (section 6.1, above), the total revenues raised by the Fee in a given year would be the product of the volume of primary polymer and the Fee amount per ton.

For example, the amount raised with a US$100 per ton Fee on primary plastic polymers would raise between around US$50 billion in 2025 and US$70 billion in 2040 under the business-as-usual scenario.

6.3.7. What would the revenues be used for? The total revenues could be divided into a retained share (that is kept within polymer producing countries) and a redistributed share. As outlined in section 6.1, the modelling is intended to illustrate the incremental impacts of different Fee roles. Consequently, in all scenarios, the redistributed share will be set at the expected cost for eligible countries to implement the same ambitious treaty outcomes.

- **Assumption – ambitious treaty outcomes**. For the purposes of modelling an illustrative scenario, we propose to follow the "Global Rules" scenario that has been developed and assessed on behalf of the Nordic Council of Ministers (and could consider other scenarios).[57]

- **Assumption – types of costs**. For the purposes of modelling an illustrative scenario, we propose the redistributed revenues could support (i) the development and maintenance of safe and environmentally sound waste management infrastructure; (ii) supporting the development of reuse, refill and repair systems; (iv) supporting substitution to alternative safe, environmentally sound and sustainable plastic and non-plastic products, chemicals and polymers; (iv) addressing legacy plastic waste; and (v) ensuring a just transition for affected populations.

- **Assumption – eligible countries**. For the purposes of modelling an illustrative scenario, we propose all low- and low-middle-income countries (based on World Bank classification) are equally eligible for

[57] Nordic Council of Ministers, "Toward Ending Plastic Pollution by 2040" (2023).

redistributed Fee revenues. The model could aggregate some individual countries into regions; if these regions contain both low- and low-middle-income countries as well as more affluent countries, the appropriate share of redistributed revenues could be determined based on the population share of low- and middle-income countries in the region.

- **Assumption – timing of revenues**. Revenues generated in one year could be assigned to a region for investment the following year. Funding will affect the plastic demand and waste flows for the following year (or years), depending on the initiative. E.g., investment in recycling infrastructure will take effect in two years due to a one year construction timeline.

**This Design Study explains the key characteristics of a plastic pollution Fee and identifies options of how to design the Fee.**

**Feedback and consultation on the Design Study will inform subsequent work towards an Impact Study on the plastic pollution Fee, to be published in the first quarter of 2024 (ahead of INC-4).**

**We expressly welcome and solicit feedback from any interested stakeholders, including government, civil society, and business. Please contact dcharles@minderoo.org and mdons@minderoo.org**

# Annex. Design options in detail

A. Design and Operation of the Fee

B. Use and Administration of the Fee Revenues

C. The Role of the Differentiation Principles

D. Treaty Integration

## Section A - Design and Operation of the Fee

This section sets out options and recommendations for the design and operation of a plastic pollution fee (Fee) as part of the legally binding international instrument (Instrument) to end plastic pollution.

The Fee entails levying a fiscal charge on upstream actors in the plastics supply chain, and using the revenue partly to fund the implementation of obligations contained in the Instrument. Decisions regarding the design and operation of the Fee should be informed by its potential roles.[58] Box 1 outlines a list of potential roles that the Fee could seek to perform.

**Box 1. Potential Roles of a Plastic Pollution Fee**

A plastic pollution Fee on polymer producers could serve as a means of treaty implementation, as well as an economic instrument to support control measures. Specifically, depending on the design of the Fee, the plastic pollution Fee could perform the following roles:

- **Financing instrument** to support treaty implementation. The Fee could raise revenue as an innovative source of funding for the implementation of the Instrument, complementing funding from traditional funding sources under the Instrument. The Fee could, for example, cover the costs of treaty implementation relating to (i) the development and maintenance of safe and environmentally sound waste management infrastructure; (ii) supporting the development of reuse, refill and repair systems; (iii) supporting substitution to alternative safe, environmentally sound and sustainable plastic and non-plastic products, chemicals and polymers; (iv) addressing legacy plastic waste; and (v) ensuring a just transition for affected populations.
- **Economic instrument** to support possible control measures under the Instrument. The Fee could be designed to influence two types of consumer behaviour:
    1. **Switching role**: the Fee could induce switching from primary plastic polymer to safe, environmentally sound and sustainable recycled plastic content or alternative plastics (e.g., sustainable biopolymers) and plastic products; and/or
    2. **Reduction role**: A Fee on plastic polymer producers could also reduce total production of, and demand for, plastics and plastic products in the economy, as a result of (i) switching to reuse, refill and repair models; (ii) switching to non-plastic substitutes; and/or (iii) increased product prices (subject to the pass-through-rate of the Fee on prices and the price elasticity of demand).

The section will propose design features of the Fee tailored to the fee's potential roles. This section will cover the following design features: (1) the legal character of the Fee; (2) the basis of the Fee; (3) the stage of imposition; (4) the amount of the Fee; (5) the use of differentiation (eco-modulation and exemptions); (6) the procedures for collection; (7) transparency and monitoring of the Fee; and (8) relationship with EPR schemes.

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### 1. The Legal Character of the Plastic Pollution Fee

As a starting point, this section addresses the nature and legal character of the plastic pollution Fee. A fiscal charge can come in the form of a Fee or a tax, with the difference depending on the intended uses of the revenues. A Fee is imposed to cover specific costs, typically the provision of services, and generates revenues to cover these costs. A tax, on the other hand, is imposed as part of the general fiscal burden,

[58] The objectives of the Instrument are yet to be determined by members of the Instrument's Intergovernmental Negotiation Committee (INC), which will further inform the objectives of the Fee.

with revenues falling within the general public purse.[59] In the case of a fiscal charge intended to contribute to ending plastic pollution, like the proposed plastic pollution Fee, the charge would properly be designated as a Fee intended to provide revenues to meet pollution costs, and ensure the effective implementation of the Instrument.[60]

### 2. The Basis of the Fee

A key issue with the imposition of a fiscal charge is the basis on which the charge is levied. The plastic pollution Fee could be levied on a specific or *ad valorem* basis. These two options are explained in Table 1 below.[61] For the time being, a specific Fee based on the weight of production would seem most appropriate. The weight of production is linked to the pollution costs of production and is more likely to generate a predictable stream of revenues.

[59] See for the distinction between taxes and other charges under U.S. and Indian law: Hugh D. Spitzer, "Taxes vs. Fees: A Curious Confusion" (2002) 38(2) *Gonzaga Law Review* 335; Bharat Ji Agrawal, "Difference between Tax & Fee and Guidelines for Drafting of Fiscal Legislation" (2001) 17 *Judicial Training & Research Institute Journal* 42.

[60] Other INC proposals refer to the proposed charge as a "fee" rather than a "tax" for similar purposes (see, e.g., Ghana's INC-2 submission, proposing a Global Plastics Pollution Fee).

[61] The information provided in Table 1 is drawn from Sergio Sastre Sanz, Marta Jofra Sora, and Dr. Ignasi Puig Ventosa, "Research paper on a European tax on plastics" (2018), *Zero Waste Europe Report,* (hereafter "Sergio Sastre Sanz, Marta Jofra Sora, and Dr. Ignasi Puig Ventosa, *Research paper on a European tax on plastics*") (available here, last accessed 8 October 2023), p. 31; Grzegorz Peszko, "Plastic taxes: a guide to new legislation in Europe" (2023), *International Tax Review* (hereafter "Grzegorz Peszko, *Plastic taxes: a guide to new legislation in Europe*") (available here, last accessed 8 October 2023).

***Table 1: The difference between a specific and ad valorem Fee***

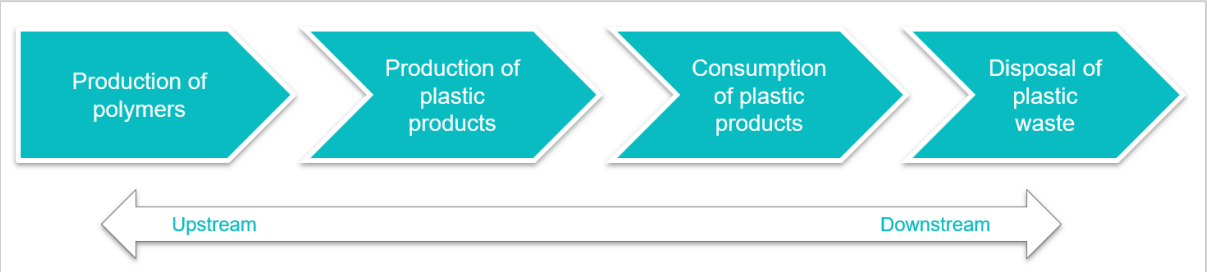
| Comparison | Specific | Ad valorem |
|---|---|---|
| **Definition** | A specific charge is based on the volume or weight of the subject product. In this case, the Fee would be charged as a specific amount per tonne of production. | An ad valorem charge is based on the value of the subject product, which is typically the sale price (or an equivalent constructed market value). In this case, the Fee would be charged as a percentage of the producer's ex-factory price. |
| **Advantages** | A specific Fee relates directly to the goal of ending plastic pollution, as the pollution impact on the environment and public health usually depends on the weight or volume of the product, and not on its market value.<br>A specific Fee is easier to administer because weight and volume of production can be more easily verified than market price.<br>A specific Fee involves a more predictable burden for producers and more predictable revenues (because it turns on the amount of production, without variation based on market value). | When based on market value, there is no need to adjust the charge over time to account for inflation and income (to maintain the economic level of the charge over time).<br>The economic burden of the charge, as a share of the producer's price and revenues, does not alter significantly (because it moves with market prices).<br>An ad valorem Fee would be linked to tax elasticity, giving a predictable impact on supply and demand. |
| **Disadvantages** | For a specific Fee, adjustment is necessary for inflation and income (to maintain the economic level of the charge over time).<br>The economic burden of the Fee, as a share of the producer's price and revenues, is variable, depending on fluctuations in market prices. This could lead to a variable impact on supply and demand. | As an ad valorem Fee would move with market prices rather than the weight and volume of plastics, the amount of the Fee is not linked with minimizing environmental damage.<br>The value to serve as the Fee base can be difficult to determine in practice.<br>An ad valorem Fee could promote the manufacture of low-priced plastics.<br>Unstable revenues would be generated for products in volatile market conditions. |
| **Examples of National Plastic Charges** | Turkey introduced in 2018 the Recycling Contribution Fee, which levies a national plastics Fee on plastic packaging.[62] For plastic packaging TRY 0.40 per kilogram is levied on the supplier, which is paid to the tax office.[63] The Turkish Environmental Agency, responsible for Zero Waste Project targets, will receive 25% of the contribution fees.[64] | Ghana levies a 10% excise tax on plastics and plastic products, 50% of which is to be paid into the Plastic Waste Recycling Fund for plastic waste management.[65] |

[62] Döne Yalçın, Taner Elmas, and Kaan Karagöl, "Plastics and Packaging Laws in Turkey" (CMS, 2023) (hereafter Döne Yalçın, Taner Elmas, and Kaan Karagöl, *Plastics and Packaging Laws in Turkey*) (available here, last accessed 8 October 2023).
[63] Döne Yalçın, Taner Elmas, and Kaan Karagöl, *Plastics and Packaging Laws in Turkey.*
[64] N. Melis Bostanoğlu, "The Future of Single-use Plastics in Turkey and the EU" (IKV, 2021) (available here, last accessed 8 October 2023).
[65] See Ghana's Excise Duty Act, 2014 (Act 878) on its government website, here, last accessed 8 October 2023.

## 3. The Stage of Imposition

This section further considers the entities that will be subject to the Fee and responsible for payment. The plastic pollution Fee could be levied on actors at different stages of the plastics supply chain, which is summarised in Figure 1 below.[66]

***Figure 1: The plastics supply chain***




During polymerization, monomers are compressed, cooled, and placed in a reactor[67] and are chemically combined to form polymer chains.[68] These polymers are thereafter processed into finished plastic that is used by producers of goods made in part or in full from plastic. Such goods are distributed to consumers and subsequently disposed. Plastic charges in national jurisdictions are frequently levied on plastic products at the production[69] and consumption stage.[70] The (dis-)advantages of levying the Fee on one of the first three stages of the plastic supply chain are displayed in Table 2 below.

[66] For the purposes of this study, the supply chain for plastics is considered to commence at the polymerization rather than the monomerization stage. As monomers are not a type of plastics themselves, a fee on monomers would be a fossil fuel fee in essence, falling outside the scope of the mandate of the Instrument conferred under UNEA Resolution 5/14. See also footnote 76, below.
[67] Reliance Foundry, "You Use it Daily. But What IS Polyethylene Plastic?" (Blog) (available here, last accessed 8 October 2023).
[68] Tim Grabiel, Tom Gammage, Clare Perry, and Christina Dixon, "Achieving sustainable production and consumption of virgin plastic polymers" (2022), 9 *Frontiers in Marine Science*.
[69] The UK Plastic Packaging Tax levies a tax of 200 GBP per tonne on the manufacture or import of polymer materials with additives.
[70] Under the Peruvian legislation, "Ley de Plásticos" No. 30884 of 2018, a tax of 0.50 is levied upon the purchase of a plastic bag.

***Table 2: Levying the Fee at different stages of the plastics supply chain***

| Plastics Supply Chain | Advantages | Disadvantages |
|---|---|---|
| **Production of polymers** | **High market concentration**: Administration of the Fee is easier at the polymerisation stage as the number of polymer producers is relatively small, creating a relatively low risk of non-collection.<br>**Polluter pays principle**: A portion of the pollution costs are internalized and borne by the "ultimate" source of plastics production (see Box 2 below).<br>**Differentiation**: The Fee could reduce polymer production and promote the use of recycled polymers over primary polymers. | **Economic instrument**: Levying a Fee at this stage may limit the impact on purchasing behaviour (switching and/or consumption reduction), as the charge may not be fully passed along the value chain.[71] This disadvantage is relevant only in case the Fee is used an economic instrument.<br>**Differentiation**: A Fee on polymers would not be able to differentiate well in terms of the pollution costs of final products (e.g., single-use vs. more durable plastics).[72] Such differentiation could be achieved by complementary charges at national level. |
| **Production of plastic products** | **Economic instrument**: Levying a Fee at the production stage is more likely to impact purchasing behaviour (switching and/or consumption reduction), as the charge may be passed along the value chain. This advantage is relevant only in case the Fee is also used as an economic instrument to support control measures. | **Very high market fragmentation**: The administration of the Fee is administratively complex and costly due to the ubiquitous number of manufacturers of products that contain plastics or plastic packaging; creating also a high risk of non-collection.<br>**Differentiation**: Exemptions for recycled plastics is administratively more complex and would require certification schemes.[73] |
| **Consumption of plastic products** | **Market-based instrument**: Levying a Fee at the consumption stage can have a more direct impact (assuming cost pass through to final consumers) on demand for plastics (switching and/or consumption reduction). This advantage is relevant only in case the Fee is used as an economic instrument to support control measures.<br>**Differentiation**: A Fee at this stage can target specific types of plastics and differentiate between single-use and durable plastics. | **Very high market fragmentation**: The administration of the Fee would be administratively complex and costly, due to the ubiquitous number of plastic products and packaging that are consumed, creating also a high risk of non-collection.[74] Tracing products containing plastics would be difficult, making the tax base difficult to define.<br>**Polluter pays principle**: The Fee would not target the "ultimate" source of pollution, the producers.<br>**Differentiation**: A Fee at this stage does not increase demand for recycled polymers upstream.[75] |

[71] David Powell, "The Price Is Right. or is it? The Case for Taxing Plastic" (2018), p. 12 (hereafter "David Powell, *The Price Is Right. or is it? The Case for Taxing Plastic*") (available here, last accessed 8 October 2023).
[72] David M. Wasieleski and James Weber, "Sustainability" (2020), 4 *Business and Society 360.*
[73] David Powell, *The Price Is Right. or is it? The Case for Taxing Plastic*, p. 15.
[74] Sergio Sastre Sanz, Marta Jofra Sora, and Dr. Ignasi Puig Ventosa, *Research paper on a European tax on plastics,* p. 17.
[75] Sergio Sastre Sanz, Marta Jofra Sora, and Dr. Ignasi Puig Ventosa, *Research paper on a European tax on plastics,* p. 15.

The plastics supply chain lends itself to a Fee imposed on upstream producers of polymers for ease of administration.[76] Economic studies suggest that a plastic Fee should be applied at the "natural choke point" in the supply chain, where the number of entities is relatively small, so as to reduce costs of collection and enforcement, and reduce risks that the charge is not properly collected.[77]

In this light, and consistent with the option set out in Zero draft,[78] the Fee would be best collected from producers of polymers, a small concentration of which can be found in a relatively small group of countries.[79] Imposing the Fee further down the value chain (*e.g.*, at the point of polymer conversion) would substantially increase the number of industry actors involved and, hence, the administrative complexity and costs[80], and the risk of non-collection.[81]

Levying the Fee on upstream producers is also consistent with the polluter pays principle ("PPP"), which is a well-established principle of international environmental law. The principle holds that the party who is responsible for pollution should bear the environmental and social costs of that pollution. The origins of the PPP are outlined in Box 2 below.[82] Many submissions to the Intergovernmental Negotiation Committee (INC) have advocated for the implementation of the PPP in the Instrument.[83] The Instrument can implement the PPP by levying the Fee upstream, at the source, on the entities responsible for producing the plastic polymers that give rise to all of the downstream pollution costs associated with plastics, as proposed by Ghana[84] and the Center for International Environmental Law (CIEL).[85]

[76] As monomers are not a type of plastics themselves, a fee on monomer production would be a fossil fuel fee in essence. Polymers are, therefore, the first "product" of the plastics supply chain.
[76] See Section 5, above.
[77] Roberton C. Williams III, "Environmental Taxation" (2016) *National Bureau of Economic Research Working Paper 22303* (available here, last accessed 8 October 2023), p. 14. See also, Erin T. Mansur, "Upstream versus Downstream Implementation of Climate Policy" in Don Fullerton and Catherine Wolfram (eds.) *The Design and Implementation of U.S. Climate Policy* (2012), pp. 179-193.
[78] Zero Draft, Section III, para 9.
[79] For example, 100 producers account for almost 90% of all polymers bound for single-use plastics. These producers are concentrated in Brazil, China, the EU, India, Indonesia, Iran, Japan, Malaysia, Mexico, Russia, Saudi Arabia, South Korea, Taiwan, Thailand, Turkey, the UK, the US, and Vietnam. Dominic Charles, Laurent Kimman, and Nakul Saran, "Plastic Waste Makers Index" (2021), Minderoo Foundation (available here, last accessed 8 October 2023).
[80] See Don Fullerton, Andrew Leicester, and Stephen Smith, "Environmental Taxes" (2008) *National Bureau of Economic Research* Working Paper 14197 (available here, last accessed 8 October 2023).
[81] As argued by CIEL and IPEN in the context of a fee or tax for the sound management of chemicals. See, *e.g.*, CIEL and IPEN, "Financing the Sound Management of Chemicals Beyond 2020: Options for a Coordinated Tax" (2020), (available here, last accessed 8 October 2023) (hereafter "Nathaniel Eisen, David Azoulay, and Joe Digangi, *Financing the Sound Management of Chemicals Beyond 2020: Options for a Coordinated Tax*").
[82] For more information, see Muhammad Munir, "History and Evolution of the Polluter Pays Principle: How an Economic Idea Became a Legal Principle" (2013) (available here, last accessed 8 October 2023).
[83] Twenty-one INC-2 country submissions make reference to the polluter pays principle: The Alliance of Small Island States (AOSIS), Australia, Ecuador, European Union, Ghana, Indonesia, Kenya, Libya, Mauritius, Monaco, Morocco, New Zealand, Nigeria, Norway, Oman, Republic of Moldova, Sri Lanka, Switzerland, Tunisia, UK, Uruguay. A number of participant submissions also refer to the polluter-pays principle, including the African Environmental Network, All-China Environmental Network, Environmental Investigation Agency, Ellen MacArthur Foundation, Greenpeace International, International Pollutants Elimination Network, and the Minderoo Foundation.
[84] Ghana proposed a Global Plastics Pollution Fee in its INC-2 submission.
[85] CIEL proposed a Plastic Pollution Trust Fund in its INC-2 submission.

**Box 2. The Polluter Pays Principle**

The PPP is reflected in Principle 16 of the Rio Declaration (1992) and entails the "internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment."

The principle has its origins in economic literature seeking to explain, and find solutions, for the significant amounts of environmental pollution and damage caused by industrialization. This pollution generates so-called negative "externalities", which are the "external" environmental and social costs that are not borne by the polluter but by society as a whole. These costs are externalized when the market price of a product generating pollution does not reflect the external costs – this is a form of market failure. Under the Pigouvian economic model, this market failure can be remedied by "internalizing" the external costs with respect to the producers responsible for the pollution.

The principle was embedded in early international declarations, such as the Council of Europe's Declaration of Principles on Air Pollution Control of 1968, the Organization for Economic Cooperation and Development's Recommendation on Guiding Principles concerning International Economic Aspects of Environmental Policies of 1972, the Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration) of 1972, and the International Convention on Oil Pollution Preparedness, Response and Co-Operation of 1990. Today, the PPP forms a cornerstone of international environmental law.

Under the traditional Pigouvian framework for levying an environmental charge in line with the PPP, a market failure can be corrected by imposing a Fee on the producers responsible for pollution.[86] In the case of plastics, polymer producers are the ultimate source of all of the plastics that cause plastics pollution. This would ensure that some portion of pollution costs are internalized within the supply chain. As noted above, a Fee on upstream producers could serve different purposes, including those set out in Box 1.[87] A Fee on polymer producers could also be complemented, at national level, by other taxes and charges on specific, problematic plastic products.

4. The Amount of the Fee

The amount of the Fee per tonne of production is a key factor of the fee's design and operation. Ultimately, this will likely be a political question. For present purposes, the following considerations seem pertinent.

The amount of the Fee should be harmonized globally under the Instrument to ensure effective implementation and a level playing field. A trusted international entity could be responsible for determining the Fee's amount and application, and ensuring that it is applied uniformly and adjusted to become more sophisticated in time.[88] The amount of the Fee should be informed by the objectives of the Instrument (to end plastic pollution) and of the Fee, specifically, as set out in Box 1.

a) If the primary objective is to raise revenues to fund treaty implementation (**financing role**), the Fee should be calibrated to ensure the amount of the revenue collected is sufficient to meet the costs that the Fee intends to cover, adapted as necessary over time. As those costs (e.g., developing safe and environmentally sound waste management) may evolve, and hopefully decline, over time, the level of

[86] Dirk Heine, John Norregaard, and Ian W.H. Parry, "Environmental Tax Reform: Principles from Theory and Practice to Date" (2012) *IMF Working Paper WP/12/180* (available here, last accessed 8 October 2023), p. 7.
[87] The objectives of the PPP in international environmental law have been interpreted differently by authors. Dirk Heine, Michael G. Faure, and Goran Dominioni, "The Polluter-Pays Principle in Climate Change Law: an Economic Appraisal" (2020), 10(1) *Climate Law*, pp. 94-115.
[88] This entity would also oversee monitoring and transparency obligations. For more information on the obligations of an international entity, see the section on Transparency and Monitoring, below.

the Fee may likewise evolve and decline. To facilitate the establishment of the Fee, the plastic pollution fee could also be phased-in, starting with a lower Fee at first.

b) If the primary objective is to shift demand towards more safe, environmentally sound and sustainable recycled plastic content or alternative plastics and plastic products (**switching role**), the Fee should be set in light of market dynamics (elasticities) to a level that will, in econometric terms, generate the desired shift in demand. Again, the capacity of Fee to cause switching behavior may be low, depending on the responsiveness of demand to relative changes in the price of different types of plastic polymers. Eco-modulation is addressed further below.

c) If the primary objective is to reduce production of plastic polymers (**reduction role**), the Fee should be set in light of market dynamics (elasticities of demand) to a level that will, in econometric terms, generate the desired impact on production. It is possible, if demand is relatively inelastic (i.e., demand is not responsive to changes in price), that a very high Fee could shift demand or, indeed, that a Fee would be unlikely to shift demand at all.

5. Differentiation: Eco-modulation and Exemptions

Eco-modulation would entail imposing a higher Fee on polymers that have higher (external) pollution costs (or are otherwise less sustainable), and vice-versa.[89] Charges are frequently eco-modulated under national taxation policies and EPR schemes, as they encourage the use of environmentally friendly and recycled materials in the plastics production.[90] Hence, certain polymers could be subject to a lower Fee (eco-modulation) or be fully exempted from the Fee (exemption).

We distinguish three approaches towards differentiating polymers and applying a lower rate (eco-modulated) or no Fee (exemption) accordingly. Acknowledging that these approaches may overlap,[91] we discuss differentiation based on (i) feedstock and polymer production; (ii) safety and polymer use; and/or (iii) end-of-life treatment and polymer disposal.[92]

These three approaches are detailed below.

***Approach 1: Differentiation based on feedstock and polymer production***

A first approach to differentiation would be to distinguish between polymers based on feedstock and polymer production. Typically, this approach would differentiate based on greenhouse gas (GHG) emissions in the production phase, but it could also be used to differentiate on social impacts (e.g., sustainability of production supply chains and the role of waste workers[93]). Eco-modulation based on GHG emissions would favour recycled polymers produced from plastic waste feedstock by resource-

[89] David Powell, *The Price Is Right. or is it? The Case for Taxing Plastic*, p. 11.
[90] Nick Voulvoulis and Richard Kirkman, "Shaping the circular economy: taxing the use of virgin resources" (2019), Imperial College London White Paper (available here, last accessed 8 October 2023), p. 2.
[91] For instance, a pipe made of polyvinyl chloride (PVC), is composed of fossil fuels and can have a life expectancy of eight to 15 years. In contrast, recycled high-density polyethylene (HDPE) pipes are made of recycled plastic and can have a lifespan of between 50 and 100 years. Reduced rates could be applied for recycled HDPE according to two eco-modulation approaches. A combination of methodologies could entail a reduced Fee rate, or no Fee, for plastics according to criteria listed under all three approaches.
[92] For further studies on differing eco-modulation methodologies, see Frithjof Laubinger, et al., "Modulated fees for extended producer responsibility schemes (EPR)" (OECD, ENV/WKP(2021)16, 2021) *Environment Working Paper No. 184*, (available here, last accessed 8 October 2023); Emma Watkins, et al, "EPR in the EU Plastics Strategy and Circular Economy: A focus on plastic packaging" (Institute for European Environmental Policy, 2022), (available here, last accessed 8 October 2023).
[93] See Zero Draft, Section II.12, para 1 (Just transition).

efficient processes (e.g., mechanically recycling and high plastic-to-plastic yield chemical recycling) and biopolymers produced from sustainable feedstocks (sustainable biopolymers). Eco-modulation could also be applied to primary polymers based on whether oil and gas or coal is used as a feedstock, or based on the chemical complexity (and resource intensity) of the polymer.[94]

***Approach 2: Differentiation based on safety and polymer use***

A second approach to eco-modulation would be to distinguish between polymers based on safety and polymer use. Fees could be differentiated based on environmental and health impacts of plastic polymers and products during their use, e.g., a lower Fee rate or exemption may only be available for recycled polymers that are safe for public health and environmentally sound;[95] or for polymers that have lower shedding rates of micro- or nano-plastics. This differentiation could encourage switching behavior towards more sustainable polymer production (see Box 1, above). A reduced rate would be levied directly on the supplier based on the sustainable component of the polymer.

Eco-modulation on these bases is common, in particular for recycled plastic content. This encourages recycling and, thereby, reduces the volume of plastics sent for final disposal (incineration or landfill).[96] The UNEP Secretariat has also suggested that preferential treatment of recycled plastic content is an appropriate policy and legislative tool that reduces plastics pollution and promotes circularity.[97] National schemes have adopted a similar approach and provide exemptions for recycled plastics. For instance, in the UK, packaging with more than 30 percent recycled plastic content is excluded from the plastic packaging tax.[98] The Italian and Spanish plastics taxes are based on the total weight of non-recycled plastic components.[99] In the context of eco-modulation of the Fee, a reduced rate could be applied to any additional recycled plastic component of the polymer product, beyond the mandatory recycled plastic content targets that would be specified in the Instrument.

In designing relevant eco-modulation or exemption criteria in favour of using recycled polymers in the production process, the environmental and health impacts should also be considered. First, a lower (or no) Fee rate should only be available for using polymers that have been recycled using processes that are safe for public health and the environment. This could involve the negotiators addressing health and environment standards for recycling, either in the treaty, an annex, or in a decision of the Conference of the Parties (COP). In all likelihood, the negotiations will address this issue, in any event, independently of the Fee. Second, using recycled polymer materials should not pose a greater risk to public health. A recent publication suggests that recycled plastics may have a higher concentration of certain chemicals than non-recycled plastics.[100]

In the case of bio-based polymers, the concerns regarding differentiation (eco-modulation or exemption) would relate to the impacts of the bio products used to produce the plastics, in terms of pressures on land-use change and food security. Further concerns pertain to the end-of-life scenarios and impacts of bio-based polymers, including their recyclability and compostability.

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[94] For comparative analysis of GHG intensity based on polymer and feedstock, see Dominic Charles and Laurent Kimman, "Plastic Waste Makers Index 2023" (2023), Minderoo Foundation (available here, last accessed 8 October 2023).

[95] A recent publication suggests that recycled plastics have a higher concentration of certain chemicals than non-recycled plastics: Greenpeace, "Forever Toxic – the science on health threats from plastic recycling" (May, 2023), (available here, last accessed 8 October 2023).

[96] David Powell, *The Price Is Right. or is it? The Case for Taxing Plastic*, p. 14.

[97] Imposing a charge on importers, producers or disposed of primary materials below a certain content of recycled material is one of the measures put forward by the UNEP Secretariat to reduce plastics pollution in preparing for the INC negotiations. UNEP, "Preparation of an international legally binding instrument on plastic pollution, including in the marine environment" (2022, UNEP/PP/INC.1/7), (available here, last accessed 8 October 2023).

[98] Grzegorz Peszko, *Plastic taxes: a guide to new legislation in Europe*.

[99] Grzegorz Peszko, *Plastic taxes: a guide to new legislation in Europe*.

[100] Greenpeace, "Forever Toxic – the science on health threats from plastic recycling" (May, 2023), (available here, last accessed 8 October 2023).

***Approach 3: Differentiation based on the end-of-life treatment and polymer disposal***

The third approach would distinguish between different types of polymer, based on the harmfulness of the different polymer types on a life-cycle basis. The following types of polymers could be differentiated according to their properties such as their life-span, durability, biodegradability, recyclability or reusability: polyethylene terephthalate (PET); polyvinyl chloride (PVC), high-density polyethylene (HDPE); medium-density polyethylene (MDPE); low-density polyethylene (LDPE); linear low-density polyethylene; polystyrene (PS); and polypropylene (PP).

Specific criteria could be developed to distinguish polymers based on their recyclability, which would take into account factors such as the existence of recycling technology for particular polymers, recycling rates, the end-product's sortability, and other polymer properties that lend themselves to recycling processes, such as its density. This approach would therefore specifically aim to encourage recycling.

This approach has been applied in EPR schemes. The French EPR scheme for household packaging, for example, is known for its "particularly advanced"[101] use of eco-modulation, applying bonuses for more environmentally friendly materials and maluses for undesired packaging.[102] For instance, this scheme specifically applies an 8% bonus for hard plastic packaging made out of PET, HDPE, or PP (besides bottles) that can join existing recycling channels.[103]

Eco-modulating an upstream charge on polymers on a life-cycle basis is not without challenges, particularly when evaluating a polymer's end-use. The harmfulness of a polymer is not simply a function of the polymer type but can vary depending on the use made of the polymer. Thus, a given polymer may be more harmful when used in short-lived products (products/packaging) and less harmful when used in long-lived products (household goods). This would make it somewhat challenging to ensure fairness in eco-modulation based on polymer type, though there might be ways to address this concern (e.g., a certification scheme).

6. The Procedures for Fee Collection

To ensure the effective implementation of the Fee, specific procedures pertaining to the Fee's collection from polymer producers would need to be formulated. This section considers whether Fee collection should be undertaken by national authorities of the country of production or an international entity.

***Option 1: The Fee is collected by national authorities of the country of production***

Option 1 would entail national authorities of the country of production imposing, collecting, and enforcing the Fee. This option is in line with the principle of sovereignty under international law, under which national authorities are responsible for imposing and collecting fiscal charges, within their territory. Due to their sovereign authority and position as the national government, States would be effective in enforcing the Fee.

The procedures for the collection and enforcement of the Fee could also be aligned with the procedures relating to other fiscal and regulatory measures that apply to polymer producers, again enhancing administrative efficiency.

[101] Jean-Pierre Schweitzer, et al., "Policy Approaches to Incentivize Sustainable Plastic Design, Background Paper 3" (OECD, 2018), (available here, last accessed 8 October 2023), p. 21.
[102] Emma Watkins, et al., "EPR in the EU Plastics Strategy and the Circular Economy: A Focus on Plastic Packaging" (Institute for European Environmental Policy, 2017), (available here, last accessed 8 October 2023), p. 35.
[103] *Ibid*, p. 35.

***Option 2: The Fee is collected by an international entity***

Under Option 2, the Fee would be directly levied on polymer producers by an international entity. The international entity would, therefore, be responsible for enforcing the collection of the Fee.

There is only one example of an internationally mandated Fee imposed directly on economic operators at an upstream level by an international fund, which was created under the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage ("IOPC Fund").[104] The IOPC is the only known international fund that has been given the responsibility for collecting and enforcing a Fee on private entities. The circumstances that led to the adoption of the fund, the "insurance-like nature of the scheme", and public concern of large oil spills in the ocean, are believed to explain the adoption of the IOPC Fund in 1971.[105]

The negotiations under the INC are of a different nature and delegating such extensive powers to an international entity may face greater opposition. This is because levying fiscal charges on producers that are active within a state's sovereign territory is a task that falls, quintessentially, within the state's own sovereign authority under public international law.

7. Transparency and Monitoring

Transparency and monitoring would be essential to ensure that a Fee is implemented and applied effectively. This should cover the collection of the Fee, the distribution of revenues, and the use of redistributed revenues. While the Fee may be collected by national authorities of the country of production, an international entity is suited to oversee transparency obligations and should be responsible for the monitoring of the Fee. The COP would be a suitable candidate for instance. Another option would be to establish a subsidiary body of the international entity that is responsible for the distribution of the funds (see section B, below), and that is also comprised of Party representatives. These aspects of Fee implementation would dovetail with the general transparency and monitoring obligations in the Instrument.

In terms of reporting, producing Parties could be expected to report to the international entity on polymer production by its producers. In that respect, aggregate data could be reported publicly, with company-specific data reported on a confidential basis. Producing Parties could also report on: their collection and enforcement activities, including the total revenues raised and any difficulties encountered with collection and enforcement; the amount of the retained revenues; and the amount of the redistributed revenues transferred to the international entity (or entities) responsible managing the redistributed revenues (see section B).

Where the COP is responsible for transparency and monitoring functions, the international entity (or entities) managing the redistributed revenues (see section B) would also report to the COP. It would report on the revenues transferred by each producing Party as well as providing a detailed report on activities undertaken using the redistributed revenues. This would extend to explaining the choices it has made in undertaking those activities, including activities considered but not undertaken; and the reasons why it

[104] The International Oil Spill Compensation Fund (IOPC Fund) is an international civil liability regime for ship-based oil pollution, which provides compensation to States and persons affected by the damage of pollution caused by oil spills. To finance the compensation, the IOPC Fund levies a tax directly on entities that receive more than 150 000 crude and heavy-fuel oil in a Member State of the IOPC Fund. State parties are responsible for reporting on the quantities of oil received and for the enforcement of payments. The IOPC Fund has an Assembly (comprised of Member State representatives) and its elected Executive Committee approves the settlement of claims. CIEL and IPEN, "Financing the Sound Management of Chemicals Beyond 2020: Options for a Coordinated Tax" (2020), (available here, last accessed 8 October 2023); IOPC Funds, "Financial Review" (2021), (available here, last accessed 8 October 2023), p. 3; IOPC Funds, "The 1992 Fund Convention" (available here, last accessed 8 October 2023); IOPC Funds, "Explanatory Note" (June 2023), (available here, last accessed 8 October 2023); United Nations Treaty Collection, "No. 17146 International Convention on the establishment of an international fund for compensation for oil pollution damage", (available here, last accessed 8 October 2023).

[105] Nathaniel Eisen, David Azoulay, and Joe Digangi, *Financing the Sound Management of Chemicals Beyond 2020: Options for a Coordinated Tax*, p. 28.

undertook some activities, in some places, but not others. It would also explain how it has contributed to the Instrument's objectives on a cost-effective basis.

Parties that are entitled to benefit from funding could also report. They would explain what funding they have requested, and what funding they have benefited from and in what ways.

The international entity would consider these reports at its regular meetings and take account of reports in decisions made or guidelines issues regarding the administration of the Fee.

8. Relationship between the Fee and EPR[106]

The Zero Draft includes provisions for both EPR (in Part II.7) and the plastic pollution Fee (in Part III.9 on financing mechanisms). To determine how they might co-exist within the context of the Instrument, it is important to consider:

- the distinctive roles that the two instruments can and should play
- the respective limitations of the two instruments
- how the two instruments could work together.

Some quarters may be concerned that the existence of both a Fee and EPR means that producers are paying twice for the same thing, but this is not an accurate interpretation. While it is the case that plastics used in products subject to EPR will already have incurred the Fee at the point of production, these quite different instruments have different purposes and will be covering different costs, thereby avoiding duplication and double taxation.

***EPR – Introduction***

- It is important to note that the obligated "producer" under EPR is typically the entity responsible for the final product that is sold to consumers, as these entities usually have the greatest impact on product design. In the case of packaging, this is best exemplified as the "brand owner". This differs from the use of the term "producers" in context of the Fee, where it is applied to the upstream polymer producers.
- EPR is a policy tool which extends a producer's responsibility to the post-consumer stage of a product's life cycle. In practice, it requires producers to take financial and/or operational responsibility for collecting, sorting and treating end-of-life products. In many high income and emerging economies, EPR has been applied as a policy tool across a range of product categories, most notably packaging, waste electrical and electronic equipment (WEEE), batteries and tyres.
- EPR aims to shift the burden of end-of-life costs away from taxpayers/citizens toward producers/consumers, in accordance with the polluter pays principle, and to incentivise producers to take account of environmental impacts when designing products.
- It is also worth noting that while the obligation might be placed on individual producers, the obligation is usually discharged collectively, through a single organisation, often owned by the obligated producers and run on a not-for-profit basis.[107]

[106] Refers to EPR or similar mechanisms, like the "reversal logistics" in Brazil.

[107] Other approaches are also implemented – some systems have a number of competing schemes, some are run on a for-profit basis. However there are a number of arguments that would suggest that a single scheme has distinct advantages.

***EPR – Distinctive roles***

- EPR is a well-known and comparatively well understood instrument for applying the polluter pays principle by making producers cover the cost of end-of-life management of products at a national level.[108] Typically, such obligations are accompanied by minimum performance standards such as mandatory recycling targets.

- EPR typically addresses plastic waste as part of an overall waste management system (e.g., for all packaging, including other materials such as paper/card, metal, glass, or for all electronic and electrical waste which contains a range of other materials). This enables the system to address the vital issue of plastic waste that is mixed with other waste and has the inherent potential to achieve greater efficiencies than a collection system focused, for example, only on plastic.

- EPR is best suited to funding the operating costs of end-of-life management. When well-designed and operated, it can provide both a reliable stream of collected materials for recycling facilities and a consistent source of funding to cover the net costs of treating the material after the positive value of those materials has been accounted for.

- EPR can also be used to influence product design (e.g., designing packaging to be more recyclable) and support re-usable packaging (to a limited degree) through adjusting or "modulating" the fees to provide a financial incentive for such changes.

- There is considerable support from global brands for the rollout of well-designed and operated EPR across all parts of the world.[109] Many businesses recognise that EPR is key to create a level playing field with aligned incentives that enables them to individually meet commitments they have made in terms of, for example, plastic packaging recyclability and recycled content.

***EPR – Limitations***

- At present, although EPR has been widely adopted, it has not always been well designed and operated, in part because it requires sophisticated governance and collection mechanisms. This suggests there may be a role for the Instrument in outlining the principles of well-designed EPR and ideally 'minimum requirements'.[110]

- Even when well designed and operated, EPR is limited in its ability to co-ordinate the development of strategic infrastructure at the appropriate geographical scale. Although the cash flows it generates can be, and are, used to finance capital investments, these have tended to be fragmented and "tactical". This can often be due to the practical limitations faced by some existing schemes whereby they are unable to co-ordinate, or sufficiently influence, every aspect of the system. Ideally, decisions about the location and size of infrastructure should be made through careful planning to maximise efficiency and minimise the risk of unused or underperforming assets.

- This can be a particular problem for smaller countries and "green field" situations where little infrastructure exists. As EPR is implemented at the national level, development of such infrastructure does not always consider the efficiencies that might be achieved through taking a regional perspective across several countries.

[108] Some EPR systems have a broader scope, including design, littering and awareness raising.
[109] See Business Coalition statement https://www.businessforplasticstreaty.org/vision-statement#Key-elements.
[110] See Zero Draft II.7. Option 2.

***Plastic Pollution Fee – Distinctive roles relative to EPR***

- A fee offers scope and flexibility to strategically target funds at a global and regional level for the greatest possible benefit and can be directed to multiple areas beyond end-of-life management (see section 3.2.2, above).

- Through raising money from the "original source" of plastic pollution funds can be distributed in a way that focuses on addressing issues specific to plastics. While such flexibility is in some ways a strength, it could also be a limitation because in an efficient and holistic waste management service, the collection and management of products and packaging that contain plastics also typically involves collecting and managing a wider range of materials (or at the very least its separation from other waste types).

***EPR and the Plastic Pollution Fee – Working Together***

While EPR and the Fee are distinctive and independent, there is significant potential for them to work in ways that would be mutually reinforcing and help accelerate the transition to plastics circularity.

- The Fee could provide financing to support the development of appropriate infrastructure for managing plastics at end of life. While EPR fees would cover the costs of collection (once the facilities are up and running), as well as sorting and treatment of end-of-life plastics in such facilities (and those costs would themselves be set so as to cover both capital and ongoing costs, plus the costs of financing the facility), EPR schemes themselves are not always well placed to co-ordinate or fund the development of such infrastructure.

- While the Instrument should outline the principles of a well-designed EPR (and ideally minimum requirements), enforcing this may be a challenge. Investment in facilities and infrastructure from revenues raised by the Fee could thus act as a "carrot" through being conditional on the relevant EPR schemes meeting certain minimum requirements.

- By helping to ensure a reliable counter-party – in the form of a well-functioning EPR scheme – and providing capital, the Fee would serve to de-risk infrastructure investments and likely leverage additional private finance for EPR systems. Leveraging additional finance will be important given that some facilities may deal with multiple materials (beyond plastics).

- By taking a global perspective, administration of revenues raised by the Fee could play a coordinating role in supporting the development of appropriate infrastructure at an appropriate spatial (which may be regional, rather than national) while also reducing the risk of stranded assets.

## Section B - Use and Administration of the Fee Revenues

This section sets out options and recommendations for the financing mechanism to support the administration, use and allocation of funding generated by the Fee. The section covers the following areas: (1) use and administration of funding under other Multilateral Environmental Agreements (MEAs), including financing options and use of funds; and (2) use and administration under the Fee, covering revenue allocation; institutional arrangements; allocation mechanisms; and operational aspects.

### 1. Use and Administration of Funding under Other MEAs

This section discusses the funding and use of funds by MEAs. MEAs have developed a number of financing options to cover costs related to the operation and implementation of the MEA. The Plastic Instrument, like other MEAs, will likely use some of these options. The Zero Draft foresees in the establishment of "a Mechanism for the provision of predictable, sustainable, adequate, accessible and timely financial resources", aimed at supporting "the implementation of this instrument by developing country Parties, particularly SIDS [small-island developing states] and least developed countries".[111]

This section sets out traditional MEA financing options; and possible uses of funds.

#### *1.1. Financing Options*

MEAs often use one or more financing options that have been developed in multilateral agreements (hereafter "traditional funding sources"). In particular, many MEA draw on mandatory and/or voluntary contributions from MEA Parties, generally member countries. Several mechanisms within MEAs stipulate that some or all of the Parties, are obligated to provide financial contributions to support the implementation of the MEA's objectives. Other MEAs operate without mandatory financial commitments from their Parties. Instead, they rely on voluntary contributions, which can be provided by both MEA Parties - those who have ratified the agreement - and non-Parties.[112] Table 3 summarizes the approaches in several MEAs.

The following provides an overview of traditional sources of MEA funding, which can be combined in an MEA:

- Mandatory individual contributions from MEA Parties: MEA Parties contribute mandatory funds based on a predetermined scale of assessments, often reflecting economic capacity. (For example, the Montreal Protocol on Substances that Deplete the Ozone Layer)

- Voluntary individual contributions from MEA Parties: MEA Parties may choose to provide voluntary funding, which could be with or without complementary mandatory contributions. (For example, the Basel Convention does not foresee mandatory contributions and relies on voluntary contributions)

- Voluntary individual contributions from private sector and/or civil society: (For example, the Bill & Melinda Gates Foundation funded initiatives of the UNFCCC[113])

[111] Zero Draft, Section III.1 (Financing).
[112] UNEP, "Existing Mechanisms for Providing Technical and Financial Assistance to Developing Countries and Countries with Economies in Transition for Environmental Projects" (UNEP/POPS/INC.2/INF/4, 1998) (available here, last accessed 8 October 2023).
[113] The Bill & Melinda Gates Foundation funded the UNFCCC's Momentum for Change Initiative in 2013. See GEF, "Innovations from GEF SGP Showcased at UNFCCC Momentum for Change" (2013) (available here, last accessed 8 October 2023).

- Voluntary contributions from international or regional organizations: international organizations, or other partners, may provide bilateral or multilateral financial assistance. (For example, multilateral development banks)

- Contributions from multipurpose funds: There exist multipurpose funds that provide funds to the implementation of a number of MEA. These multipurpose funds are themselves funded based on one or more of the sources above. For example, the GEF serves as a financial mechanism for several environmental treaties, and is funded by contributions under various MEAs

For the Instrument, the Zero Draft foresees that State Parties "should" increase their support for implementing by developing country Parties; whereas multilateral organizations, agencies, and funds are "encouraged to" increase their support.[114] The Mechanism foreseen under the Zero Draft "shall include financial resources from all sources, domestic and international, public, and private".[115]

In addition to these traditional funding sources, the resources generated by the Fee would add a unique and novel source of funding to the traditional sources of MEA funding, as the Fee would, consistent with the polluter-pays principle, involve a mandatory contribution from the private sector (i.e., plastic polymer producers). In this new approach, the Fee is not borne by MEA Parties but by plastic producers. As a result, the financial burden related to plastic pollution is shared by producers (through the Fee) and Parties, and other stakeholders (through their funding of the Mechanism).

In MEAs, the collection of the traditional resources is carried out in so-called replenishment cycles. Replenishment is usually undertaken when the resources within the financial mechanism of the MEA become insufficient to cover the needs and activities under the MEA. Replenishment involves negotiating and determining the amount of financial resources that MEA Parties commit to provide over a specific period. For example, the GEF replenishment process is a negotiation among member countries to determine the total funding amount for the upcoming replenishment cycle.[116] Countries pledge financial contributions, and the cumulative pledges form the total amount available for projects. Replenishment negotiations consider the funding needs of various MEAs served by GEF and allocate resources accordingly.

Funding mechanisms in multilateral agreements, including MEAs, typically involve developed countries making higher funding contributions (mandatory and voluntary) than developing countries. The reason for this is that funding mechanisms in multilateral agreements, such as climate finance, often consider the relative capacity of MEA parties to support the MEA.[117] Some MEAs base this on the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC), and/or the need to give special priority to the special situation and needs of developing countries.[118] In practice, this differentiation is often achieved with assessment formulas that determine the amount of (mandatory) contributions within an MEA. The formula usually considers factors such as a MEA Party's GDP, emissions, and other relevant metrics to establish an proportionate distribution of financial contributions among the Parties.[119]

[114] Zero Draft, Section III.1, paras 1, 2.
[115] Zero Draft, Section III.1, para 4.
[116] To view the GEF 2022 Replenishment Report and Negotiation Documents, see GEF, "Funding" (available here, last accessed on 8 October 2023).
[117] See, for example, the Paris Agreement (2015).
[118] See United Nations Framework Convention on Climate Change (1992) (UNFCCC); Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997) (Kyoto Protocol).
[119] See UNGA, "Committee on Contributions" (available here, last accessed 8 October 2023).

***Table 3: Funding mechanisms under international treaties and conventions***

| Agreement | Funding Source | Funding Mechanism | Funding Type | Funding Purpose | Administration |
|---|---|---|---|---|---|
| **Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal** | Party contributions | General Trust Fund | Mandatory contributions | Operational costs, e.g. Secretariat | Secretariat of the Basel, Rotterdam and Stockholm Conventions |
| | | Technical Cooperation Trust Fund of the Basel Convention | Voluntary contributions | Financial support to assist developing countries and other countries in need of technical assistance in the implementation of the Convention. | Secretariat of the Basel, Rotterdam and Stockholm Conventions |
| **Convention on Biological Diversity** | Party contributions | No specific mechanism | Mandatory contributions | Operational costs, e.g. Secretariat | Secretariat of the Convention on Biological Diversity / United Nations Environment Programme / Contributions |
| | | Global Environmental Facility (GEF) | Mandatory contributions | Mandatory contributions are made to the GEF Core Trust Fund | GEF Council responsible for operations. |
| | | Special Voluntary contributions | Voluntary contributions | TBC | Secretariat of the Convention on Biological Diversity / Contributions |
| **Montreal Protocol on Substances that Deplete the Ozone Layer** | Party contributions | No specific mechanism | Mandatory contributions | Operational costs, e.g. Secretariat | Ozone Secretariat |
| | | Multilateral Fund (mandatory contributions)[120] | Mandatory contributions | Financial support to developing countries to help them phase out ozone-depleting substances and adopt alternative technologies | Executive Committee assisted by the Fund Secretariat |

[120] Article 10A of the Montreal Protocol on Substances that Deplete the Ozone Layer (1987) (Montreal Protocol).

| Agreement | Funding Source | Funding Mechanism | Funding Type | Funding Purpose | Administration |
|---|---|---|---|---|---|
| **United Nations Framework Convention on Climate Change (UNFCCC)** | Party contributions | No specific mechanism | Mandatory contributions + voluntary contributions TBC<br><br>Fund with amounts based on the burden-sharing formula of the International Development Association. | Operational costs, e.g. Secretariat | UNFCCC Secretariat. |
| | | Global Environmental Facility (also manages two additional funds: Special Climate Change Fund (SCCF) and the Least Developed Countries Fund (LDCF))[121] | Mandatory contributions are made to the GEF Core Trust<br><br>Fund with amounts based on the burden-sharing formula of the International Development Association. | Financial support to environmental projects, including those related to climate change, biodiversity, land degradation | The GEF Council is responsible for operations. |
| | | Green Climate Fund | | Financial support to projects that channel funds from developed to developing countries to support projects that address climate change mitigation and adaptation | GCF Secretariat is responsible to day to day operations. |

[121] See UNFCCC, "Introduction to Climate Finance" (available here, last accessed 8 October 2023).

| Agreement | Funding Source | Funding Mechanism | Funding Type | Funding Purpose | Administration |
|---|---|---|---|---|---|
| | | Adaptation Fund (Kyoto Protocol in 2001)[122] | | Finance adaptation projects in developing countries that are vulnerable to the adverse effects of climate change | Adaptation Fund Board supervises and manages the fund. |
| | | Technology Mechanism[123] | | Financial support to the development and transfer of environmentally sound technologies to developing countries to help them address climate change | Climate Technology Centre and Network guided by the COP through an advisory board. |
| | | Capacity Building Mechanism | | Financial support to initiative to build the capacity of developing countries to better understand, plan, and implement climate action | Paris Committee on Capacity-building (PCCB) |

[122] See UNFCCC, "Adaption Fund" (available here, last accessed 8 October 2023).
[123] See UNFCCC, "Support for implementing climate technology activities" (available here, last accessed 8 October 2023).

### *1.2. Use of Funds*

Once financing sources are determined, a MEA can collect and use these resources to cover costs related to the operation and implementation of the MEA. Research shows that the presence of effective funding mechanisms within international agreements can positively influence the likelihood of countries' participation and adherence to treaty obligations.[124]

#### (i) Types of Uses

MEAs encompass a range a range of costs related to their operation and implementation. The determination of which costs are financed within a MEA is typically made through the treaty text as part of the conclusion of the treaty itself, with the agreed aspects recorded in an annex, or through decisions made by the COP. Financing could cover the following areas of treaty funding commonly found in MEAs:[125]

**Box 3. Common Areas of Treaty Funding**

- Operational costs
- Program costs
- Research and development costs
- Incremental costs[1]
- Financial Assistance
- Technical assistance
- Capacity Building
- Education and others

Instead of paying costs individually, MEAs usually organize costs into areas of treaty funding ("areas of treaty funding"):

- **Operational Costs:** This category involves covering the operational expenses of the organization responsible for managing and coordinating the fund.
- **Financial Support:** These funds are directed toward supporting initiatives in countries based on special need. This covers enabling activities and incremental costs.
- **Other Financing:** This pertains to establishing a stable and ongoing source of funding for long-term goals under the Instrument.

The process of channelling resources to areas of implementation can be achieved by creating different types of funding mechanisms or "vehicles". In many cases, financial resources within an MEA are dispersed by the use of funds.

There are different options for disbursement, ranging from the creation of new funds or the use of funds that already exist within international agreements or institutions. Funds can further be distinguished into specialized funds that provide funding to one purpose.[126] Another option is to create multipurpose funds

[124] Steffen Mohrenberg, Vally Koubi, and Thomas Bernauer, "Effects of Funding Mechanisms on Participation in Multilateral Environmental Agreements" (2019), *19 Intl Env't Agreements: Pol. L. & Econs.* 1.

[125] See also Environmental Investigation Agency, "Convention on Plastic Pollution: Essential Element: Financial Aspects" (2022), (available here, last accessed 8 October 2023) (hereafter "*Environmental Investigation Agency, Convention on Plastic Pollution: Essential Element: Financial Aspects*").

[126] See *Environmental Investigation Agency, Convention on Plastic Pollution: Essential Element: Financial Aspects*. For example, the Basel Convention includes a Technical Cooperation Trust Fund which is a specialized fund to assist developing countries and other countries in

that finance more than one cost. For example, the UNEP Environment Fund is a multipurpose fund of which 87% finance the implementation of UNEP strategies and programmes, capacity building. The remaining 3% go to cover operational costs related to the hosting of assemblies and of the secretariat.[127] The Fund is separate from other funds initiated or administered by UNEP, *e.g.*, GEF.

(ii) Types of Funding

MEAs specify the type of project financing that would be covered. The options cover grants; co-financing and debt facilities.

Grants are non-repayable funds provided for specific purposes, commonly used for charitable or project-specific goals. Co-financing involves multiple parties sharing project costs, which can require other funding to be already secured or conditional on it. Debt facilities, such as loans or bonds, provide borrowed funds that must be repaid with or without interest. Grants are prevalent in humanitarian aid and non-profit activities. Co-financing is often seen in international development projects, while debt facilities are often used for infrastructure development.

Learning from the Green Climate Fund's (GCF's) approach, offering financing and co-financing opportunities enables collaboration and leverages additional resources for impactful projects. These options can be further divided into different funding modalities. For example, Green Environmental Facility (GEF) provides funding through four modalities: full-sized projects, medium-sized projects, enabling activities (the preparation of a plan, strategy, or report to fulfill commitments under a convention), and programmatic approaches.

2. Use and Administration of the Fee Revenue under the Instrument

This section discusses the distribution and use of revenues collected under the Fee. In turn, this section discusses options for: revenue allocation; institutional arrangements; allocation mechanisms; and governance aspects.

*2.1. Possible Revenue Allocation*

This section first explains that plastic producing Parties could retain a share of the Fee revenue; and, next, discusses how the redistributed share could be used, also in relation to traditional funding sources under the Instrument

(i) Retained Share

The Fee will be collected by Parties with domestic polymer producers. These polymer-producing countries should be allowed to retain a portion of the revenues collected by the Fee; and the remaining revenue would be redistributed among the parties (redistributed share; see below).

The retained share could be calculated as follows:

- Collection costs (plus mark-up): The retained share (i) should, at a minimum, cover the costs of collection of the Fee, and; (ii) could, in addition, include a mark-up to incentivize collection; and participation by polymer producer countries. As collection costs may differ across polymer producing countries (e.g., higher costs for developing countries), the retained share

need of technical assistance in the implementation of the Convention. See UNEP, "Basel Convention Trust Fund to Assist Developing Countries and other Countries in Need of Technical Assistance (BD) Status of contributions 2023", (available here, last accessed 8 October 2023).

[127] See UNEP, "Environment Fund", (available here, last accessed 8 October 2023).

based on collection costs may differ too. The collection costs may also change over time.

- Next, the question arises whether the retained share should go beyond the collection costs (plus a mark-up). Two options are present:

  - Option 1 is to allow producer countries to retain a higher retained share, beyond collection costs (plus a mark-up), which they could use to cover the costs of treaty implementation. Retained revenues could be applied to the public purse or earmarked for addressing plastic pollution. Retained shares could be differentiated between producer countries to reflect different stages of development. Arguably, under this option, the portion of the retained shares going beyond collection costs would be deducted from any amount that the country could obtain from the pot of redistributed revenue.

  - Option 2 is to not to allow producer countries to retain a higher retained share, beyond collection costs (plus a mark-up). Under this option, the producer country would, like any other non-producer party, be eligible to receive funding from the pot of redistributed revenue, assuming the country meets the eligibility criteria for such funding (see below). Under this option, the funding resulting from the Fee that is allocated to producer countries will also be differentiated to reflect different stages of development, as a result of the eligibility criteria for the allocation of redistributed revenue (see below).

The balance between retained and redistributed shares could also be designed to evolve over time, with the balance shifting. This evolution could be guided by decisions made by the COP – the governing body of the Instrument. The COP's periodic assessments and updates on the fund's performance, outcomes, and global plastic pollution trends could inform adjustments to the revenue-sharing arrangement.

(ii) Redistributed Share

The revenue from the Fee not retained by the polymer producers parties will be redistributed among the parties. Three options are present to redistribute this revenue:

***Option 1: Separate funding mechanisms***

The Fee could exist alongside but separate from traditional funding sources, both in terms of administration and allocation of funds. The traditional funding sources could cover, as they routinely do, the costs of more traditional areas for treaty funding, such as those listed above. For these costs, the Fee would not be pooled with traditional funding resources. This would mean that the Fee could remain for use as an innovative funding source for purposes that are specific to the challenges of plastic pollution. That is, the Fee would be capable of supporting a diverse range of purposes, including the following:

**Box 4. Examples of Funding Purposes of the Fee**

- the development and maintenance of safe and environmentally sound waste management infrastructure
- supporting the development of reuse, refill and repair systems
- supporting substitution to alternative safe, environmentally sound and sustainable plastic and non-plastic products, chemicals and polymers
- addressing legacy plastic waste
- ensuring a just transition for affected populations

One of such purpose could be the development of environmentally-sound waste infrastructure, including the construction of modern recycling facilities, waste collection systems, and sustainable disposal methods. These investments could significantly enhance a country's capacity to manage and recycle plastics efficiently, contributing to the goals of the Instrument to end plastic pollution. Another purpose could be to provide funding for a "just transition" for informal workers currently involved in plastic-waste related activities. This could involve formalization of this sector and just transition to alternative livelihoods and circular solutions.[128]

Alongside its use as an innovative funding source, the Fee would also have to cover its own operational costs. Operational costs cover the activities of the Fee fund's administrative body. Drawing inspiration from the Basel Convention's example, a Fee fund could, therefore, involve a combination of a general trust fund (operational costs) and a specialized trust fund (programmatic costs). This hybrid approach ensures that both program costs (*e.g.*, project implementation) and operational costs (e.g., secretariat support) are covered efficiently.

### *Option 2: Hybrid funding mechanisms*

The Fee and traditional funding sources could exist separately, with the possibility for cross-funding respective core activities.

On the one hand, some portion of traditional funding could be used to fund areas of treaty implementation that are, in principle, financed by the Fee. This could be to create, for instance, programs of a larger size, bigger geographical impact, or more novel character than would otherwise be funded by the Fee only. These collaborative projects would be motivated by, and in alignment with, the objectives of the Fee. Depending on the level of redistributed revenues generated by the Fee, in particular if it were lower, the possibility to use traditional sources to co-fund "Fee"-type of activities may contribute to ensuring predictable sources of revenue for these activities; and/or,

On the other hand, some portion of the redistributed revenues from the Fee could be used to fund areas of treaty implementation that are, in principle, financed by traditional funding sources. This could cover all areas covered in principle by traditional funding sources, or only those areas that relate to the Fee's objectives.

### *Option 3: Pooled funding mechanisms*

Finally, the Fee could be pooled with traditional funding sources in administration and allocation, with one single pot of funding available to cover both traditional areas covered treaty funding (operational costs, capacity building, research and development and education), and novel areas specific to the challenges

[128] See, for example, the INC-2 Submissions of Brazil, Canada, New Zealand, the UNDP, and Greenpeace International which are available at UNEP, "Second Session (INC-2): Pre-session submissions" (available here, last accessed 8 October 2023).

of plastic pollution (Box 4, above). A disadvantage of this option is that it may weaken the link between the reason for imposing the Fee (i.e., to implement the polluter-pays principle in relation to unique costs associated with plastic pollution) and the specific activities funded by the Fee (i.e., activities aimed at ending plastic pollution).

### *2.2. Possible Institutional Arrangements*

This section discusses the institutional design of the Fee funding mechanism. This involves the question of which entity or entities would be responsible for administering and allocating the redistributed revenues of the Fee.

The Fee structure can, in particular, build on different institutional models that have been developed at the international level.[129] It is also instructive to consider the institutional approaches that have been taken to implement extended producer responsibility (EPR) schemes, where producer responsibility organizations (PROs), representing producer interests, are often given responsibility for developing waste management schemes.

Whilst not discussed in further detail below, we note that the actual governance arrangements for the entity appointed to manage the financial mechanism must also be considered. The composition of the governing body is often critically important to ensure a balance of representation from different countries. For example, with both the Adaptation Fund and the Green Climate Fund, ensuring majority representation of developing countries and having seats for SIDS and LDCs was seen as a way of enabling needs-based, rather than donor priority approaches to finance.

#### (i) Single or Multiple Entities

A first question would be whether the redistributed revenues should be administered by a single entity or whether other entities could also play a role. In part, the answer to this question will turn on the amount of the redistributed revenues and also on the purposes for which the revenues can be used. The higher the available amount, and the larger the number of uses, the stronger the justification for considering more than one entity. In particular, responsibility for different uses could be given to different entities. Entities could be global or regional; they could be public or private; and they could be existing or new. When multiple entities are involved, a particular challenge is to ensure consistency of approaches to governance, oversight and administration (including managing risks of maladministration); and this approach also comes with an additional administrative burden. Parties to the COP will have to review reports from, and provide guidance to, multiple financial entities.

In many national EPR schemes, producers comply collectively with their responsibilities to establish a waste management infrastructure through a central entity, known as PRO. Some schemes even involve multiple PROs. The PRO collects EPR fees from producers and then uses the revenues to meet the producers' EPR obligations. Most PROs are led by the producers on whose behalf they work and are, therefore, accountable to them; in that case, the PRO is typically supervised by public authorities to ensure it fulfils its duties. Some PROs are State led. Compared to a producer alone, a PRO has the advantage of scale, enabling it to establish and operate more efficiently a waste management system that addresses the needs of all producers and consumers. In practice, PROs have proved to be an effective way to develop waste management schemes, in part because of their accountability to producers (which helps to ensure that the producers' fees are properly used).

This model could be replicated with the Fee. One or more industry-led PROs could be established (e.g., on a regional basis), supervised by the COP, to implement waste management schemes. For the

[129] See, for example, Environmental Investigation Agency, "Convention on Plastic Pollution: Essential Elements: Financial Aspects" (2022), pp. 5-6; Sophie Smyth and Anna Triponel, "Funding Global Health" (2013), 15(1) *Health and Human Rights* 58-70 (hereafter "Sophie Smyth and Anna Triponel, *Funding Global Health*").

administration of revenues for other purposes (e.g., remediation and capacity building), other entities could be used, building on the international approaches outlined above.

Apart from deciding how many entities should be involved, the establishment of a Fee fund involves the choice for an institution to govern the fund and its administration. In this context, it seems helpful to distinguish between an independent and integrated approach, with a hybrid approach situated in the middle. The Zero draft contemplates two of these approaches: (1) a fund within an existing financial arrangement (integrated approach) or (2) a newly established fund (independent approach).[130] These options are distinguished with examples from other MEAs.

***Option 1: Integrated approach***

Initially, the predominant approach for global financing mechanisms involved the establishment of funding arrangements that are integrated into existing international institutions and agreements.[131] This approach often relies on trust funds.[132] A trust fund is a separate account or entity, which pools and holds resources. The power to manage and allocate the trust funds is enjoyed by the trustee. In the context of international funding arrangements, trust funds are typically established under the authority of an international organization, treaty or agreement, with the organization or treaty body acting as the trustee for the funds. Sometimes different models of trust funds are distinguished.[133] Under a full trust fund, contributors relinquish all power to the trustee. In a quasi-trust fund model, contributors relinquish some power over the funds but retain certain powers, such as the allocation of resources.[134] In this regard, the Zero draft contemplates that a fund could be established within an existing fund, such as the Global Environment Facility (GEF).[135]

***Option 2: Independent approach***

Over time, a shift has been observed towards the creation of new, independent organizations to manage financial resources for global initiatives.[136] This new generation of financing arrangements sought to establish autonomous entities, which are dedicated solely to the funding and execution of specific global goals.[137] These independent organizations have governance structures that are entirely separate from existing institutions. They are intended to ensure better focus on the funding goals and avoid influence from existing institutions with other responsibilities. In this regard, the Zero draft contemplates that the fund could also be established as a newly established fund dedicated to specific purposes, such as addressing legacy plastic waste or innovation.[138]

[130] Zero Draft, Section III.1 (Financing).
[131] For example, the trust funds administered by the World Bank Group, such as the Global Facility to Decarbonize Transport Multi-Donor Trust Fund or the Climate Support Facility. For a full list see here (last accessed 8 October 2023); Sophie Smyth and Anna Triponel, "Funding Global Health" (June 2013), *Health and Human Rights* 15, no. 1, pp. 58-70; this option has also been considered by Co-facilitators' summary of UNEP Contact Group 2, see here (last accessed 8 October 2023).
[132] Erin R. Graham "Follow the Money: How Trends in Financing Are Changing Governance at International Organizations" (2017), 8(S5) *Global Policy* 15-25 (available here, last accessed 8 October 2023).
[133] Sophie Smyth and Anna Triponel, *Funding Global Health.*
[134] For example, the Global Environmental Facility which combines an independent Secretariat with having the World Bank as its trustee. See NDC Partnership, "Global Environment Facility (GEF) Trust Fund" (available here, last accessed 8 October 2023).
[135] Zero Draft, Section III.1 (Financing).
[136] Sophie Smyth and Anna Triponel, *Funding Global Health.*
[137] For example, the Global Alliance Vaccine Initiative Foundation (GAVI Foundation), the Global Fund to Fight HIV Aids, Malaria and Tuberculosis (GAVI) and the Green Climate Fund (GCF) were established or transformed into autonomous entities. See Sophie Smyth, "Agency and Accountability in Multilateral Development Finance: An Agenda for Change" (2012), 4 L. & DEV. REV. 65, *Temple University Legal Studies Research Paper No. 2012-35*; The Global Fund, "Report of the Executive Director" (GF/B19/3, 2009), available here (last accessed 8 October 2023); Abrar Chaudhury, "Role of Intermediaries in Shaping Climate Finance in Developing Countries—Lessons from the Green Climate Fund" (2020), *Sustainability* 12, no. 14, p. 5507.
[138] Zero Draft, Section III.1 (Financing).

***Option 3: Hybrid approach***

Despite this trend, some initiatives have been based on a middle way, with the creation of specialized financial entities within the framework of existing organizations. For instance, the Global Fund (GF) and Green Climate Fund (GCF) opted to utilize the financial management services of the World Bank. A variation on this approach would be to use the services on regional development banks to the extent that it is deemed to desirable to have the Fee administered regionally.

This hybrid approach avoids the need to create entirely new financial management systems from scratch. This approach allows existing expertise and resources to be used, while tailoring the initiatives to specific objectives. The Zero draft currently does not explicitly mention this approach among the presented options but it could be a feature of the presented option to establish a newly established fund.[139]

To make a choice between these approaches involves considering the set of advantages and disadvantages of each approach. As summarized in Table 4, the independent approach involves creating new entities which allows to maintain separate structures from existing international frameworks and agreements.[140] This can be seen as positive or negative depending on the context. While it increases the independence of the funds, it also means additional costs for administration and governance. The hybrid model can minimize these costs but does not entirely resolve this disadvantage.

[139] Zero Draft, Section III.1 (Financing).

[140] The Co-facilitators' summary of UNEP Contact Group 2 noted these advantages and disadvantages when considering options for a financing mechanism under a Plastics Treaty. See UNEP, *Co-facilitators' summary of Contact Group 2.*

***Table 4: Options for an international Fee funding mechanism***

| Comparison | Independent Approach | | Integrated Approach | |
|---|---|---|---|---|
| | **New Entity Model** | **Hybrid Approach** | **Trust Fund Model** | **Quasi-Trust Fund Model** |
| **Description** | Contributors retain all power over funds. This typically involves the creation of a new entity. | New entity which uses assistance from other institutions. | Contributors relinquish all power over funds to trustee. The trustee is typically an international entity with full powers to allocate resources. | Contributors relinquish some power over funds to trustee. Allocation of resources administered independently from trustee. |
| **Examples** | Global Alliance Vaccine Initiative Foundation (GAVI Foundation) | Green Climate Fund;<br><br>Global Fund to Fight HIV Aids, Malaria and Tuberculosis<br><br>(both use financial management by World Bank) | ProBlue Fund (under World Bank);<br><br>Global Facility to Decarbonize Transport Multi-Donor Trust Fund (under World Bank);<br><br>Climate Support Facility (under World Bank)[141] | Global Environmental Facility (GEF) |
| **Advantages** | High independence | Benefit from services and expertise of other entities | Lower administration costs | Allocation of resources is independent from trustee |
| **Disadvantages** | Risk of a lack of coordination, duplication, high administration costs | Less independence compared to new entity model | No capacity to enter into legal agreements itself;<br><br>Dependence on trustee/institution | No capacity to enter into legal agreements itself;<br><br>Dependence on trustee/institution |

[141] The World Bank Group has made a full list of current trust fund programs available. See World Bank, *Directory of Trust Fund Programs.*

### *2.3. Possible Allocations Mechanics*

For a Fee fund to be able to distribute fund revenues, it requires an allocation tool. As detailed below, international financing mechanisms often use allocation mechanisms based on allocation formula to distribute funds among eligible countries or projects. This section focuses on allocation formula as the most common approach but there are alternatives that can be suitable in some contexts. These include competitive bidding, a qualitative assessment of needs, or targeted funding based on priorities without an allocation formula. As seen below, allocation formula can integrate elements from these alternative approaches.

In general, allocation mechanisms offer numerous choices that can lead to very different allocation outcomes. In particular, the choices made in respect of pre-allocation of funds and eligibility criteria shape the allocation significantly. Therefore, the design of the allocation mechanism and formula should be undertaken with close consideration of the objectives of the financial mechanism to ensure the outcomes reflect the objectives.

**Box 5. Steps for the Allocation Mechanism**

1. Determine available funds from revenue-sharing
2. Split fund (e.g. operational/programmatic, catalytic, categories)
3. Pre-allocate funds (priorities, regions)
4. Apply country parameters (eligibility, categorization)
5. Calculate with technical parameters (needs x performance)
6. Make adjustments (minimum/maximum)

= Final allocation

#### (i) Options for Allocation Mechanisms

The design of an allocation mechanism shapes allocation of the funds according to priorities, technical criteria and other considerations. In its most basic form, the fund resources can be divided into funding types, priorities or regions. Then eligible recipients are identified, either by way of members or application for project funding. Then, data related to chosen criteria, like need and performance, is collected. Depending on the mechanism used, this data is quantified and used to calculate scores, allocation or allocation shares. In the case of scores, recipients are ranked and resources are allocated in order of ranking, ensuring those with higher scores receive more resources.

This basic mechanism can integrate a range of options that have been developed by international financing mechanisms:

**Box 6. Options for the Allocation Mechanism**

Option 1: Pre-division of funds
Option 2: Pre-allocation (priorities, regions)
Option 3: Project pre-selection
Option 4: Pre-selection of recipients with eligibility criteria

***Option 1: Pre-division of funds***

The basic mechanism can include a stage where the fund resources are divided before an allocation is made to recipients. This is related to the question of which costs the fund would cover. One option is to set aside a portion of the fund for special purposes.

For example, the Global Fund (GF) sets aside "catalytic funds" as a portion of the available funding for programmes that are essential to achieve the aims of the fund, but are not adequately provided through the allocations formula alone.[142] Another option is to establish more than one "catalytic fund".

One proposed model uses three categories which make funding available for countries according to their capacity with a separate category for funding of large "transformative" projects. The three categories differ in terms of the level of funding that is available and the ownership of recipients over the project. The goal is to recognize the needs of highly vulnerable, but often low capacity countries, by providing them with simplified access to guaranteed allocations, provided that basic standards of project design and management are met. Countries can move from the first category to the second and transformative category as they become more experienced in the implementation of projects under the fund.

In the case of a Fee, the model could include splitting the available resources into support for developing countries and other types of financing. Under the first category, direct financial assistance could be available that supports the special needs of developing countries. In a second category, funds could be allocated to encourage other efforts by all countries regardless of their stage of development.

***Option 2: Pre-allocation of funds***

The basic mechanism can divide the total amounts of funds to be dispersed before an allocation to recipients is made. This ensures that funding will be made available for different purposes and allows an individual level of funding to be set across funding priorities.

For example, GEF focuses on six primary thematic areas (focal areas). These include biodiversity, climate change, international waters, land degradation, chemicals and waste, and sustainable forest management.[143] These priorities play a central role in the allocation of GEF funds. In a first step, a country score is calculated using an allocation formula. According to this, GEF assigns each country a country score in each "focal area". Based on this country score, a country share is calculated. Finally, the country allocation is calculated. Countries have full flexibility to utilize resources across their focal areas-specific allocation without restriction.

Instead of thematic priorities, funding can also be divided according to geographical considerations. For example, UNDP divides its total resources for programming between country programming and inter-country programming (sub-regional, interregional, global).

***Option 3: Project pre-selection***

The basic mechanism can include a pre-selection of eligible programmes or countries. Instead of allocating funds among eligible countries according to a formula, countries have to submit proposals for projects. Only pre-selected projects will then receive funding according to the allocation formula. This is the model that has been adopted by GEF and GF. In the case of GEF, countries can submit project proposals to apply for funding that must align with GEF priorities. These submissions are assessed based on technical, financial, environmental and social considerations. GEF provides templates and guidance to assist countries in preparing project proposals. Once the proposals are selected and approved by the GEF council, they receive financial allocation based on available funds and the allocation formula. GF has

[142] The Global Fund, "Sources of Funding" (2023) (available here, last accessed 8 October 2023).
[143] For information on GEF's focal areas, see UNEP, "Focal Areas: Leveraging environmental expertise for lasting change" (available here, last accessed 8 October 2023).

adopted a similar model. A GF review panel assesses the merits of each application with the aim of ensuring that investments achieve the highest impact. Selected applications then receive funding according to an allocation formula. The Secretariat can make adjustments based on qualitative factors that may include major sources of external financing and minimum funding levels.

***Option 4: Pre-selection of recipients with eligibility criteria***

International funding mechanisms have two main approaches to distributing funds: restricting funding to eligible countries or using an allocation formula to select recipients. The two approaches can also be combined. For example, GEF provides funding to developing and developed countries, economies in transition, Small Island Developing States, and Least Developed Countries. Eligibility is based on the World Bank classification and specific conventions supported by the GEF. Indigenous peoples and local communities are also considered in certain projects.

Other funds have focused eligibility on a special group of recipients. The GCF primarily focuses on providing funding to developing countries to support climate mitigation and adaption efforts. The eligibility criteria can be based on internationally recognized criteria such as stage of development but also include other specialized criteria of eligibility. For example, the Global Alliance Vaccine Initiative Foundation (GAVI Foundation) makes eligibility dependent on whether countries have demonstrated a commitment to immunization by contributing co-financing to the vaccination programs. This co-financing helps ensure the sustainability of immunization efforts.

(ii) Allocation Formula

Allocation formula are most often based on a multiplicative formula to calculate the share for funding recipients. As illustrated in Box 7, this formula generally attempts to consider recipient needs and performance criteria relating to policy and institutional capacity.

Table 5 shows examples of allocation formula in international financing mechanisms. The alternative of using additive formula where factors can be independently considered are rarely used in international financing mechanisms.

**Box 7. Basic Allocation Formula**

Needs criteria x performance criteria = allocation → adjustments → final allocation

The use of an allocation formula can involve an adjustment of the initial allocation. Common types of adjustment are minimum and maximum adjustments. These adjustments can help prevent extreme shifts in allocation and ensure that allocation is perceived as equitable across funding recipients. For example, if a country is already implementing a successful plastic waste management program, a minimum adjustment can guarantee a certain level of continued funding to sustain those efforts. [144]

[144] For example, the current GF Allocation Mechanism 2023-2025 had a minimum and maximum share. See The Global Fund, "Allocation Methodology for the 2023-2025 Allocation Period 47th Board Meeting" (2022, GF/B47/03), (available here, last accessed 8 October 2023), p. 21.

***Table 5: Examples of allocation formula[145]***

| Multilateral Development Institution, Fund | Needs Factors | | Performance Factors | Results |
|---|---|---|---|---|
| Global Environment Facility, GEF Trust Fund | $\mathbf{GBI}^{0.8} * \left(\frac{\mathbf{GDP}}{\mathbf{capita}}\right)^{-0.08}$ | × | $(0.65\mathbf{CEPIA} + 0.15\mathbf{CPIA_D} + 0.2\mathbf{Portfolio})$ | = allocation share |
| African Development Bank, African Development Fund | $\mathbf{Population}^{1} * \left(\frac{\mathbf{GNI}}{\boldsymbol{capita}}\right)^{-0.125} * \boldsymbol{AIDI}^{-0.125}$ | × | $(0.26\mathbf{CEPIA_{a\text{-}c}} + 0.58\mathbf{CPIA_D} + 0.16\mathbf{Portfolio})$ | = allocation share |
| World Bank, IDA | $\mathbf{Population}^{1} * \left(\frac{\mathbf{GNI}}{\mathbf{capita}}\right)^{-0.125}$ | × | $(0.26\mathbf{CEPIA_{a\text{-}c}} + 0.68\mathbf{CPIA_D} + 0.08\mathbf{Portfolio})^{3}$ | = allocation share |

(iii) Allocation Criteria

Allocation criteria play a crucial role in as they calculate the allocation between recipients. Two primary types of allocation criteria are needs-based criteria and performance-based criteria.[146] In practice, criteria have often used data that is quantifiable and available at a global scale. In many cases international indexes are used to create the criteria. This includes indexes developed by international organizations (indexes developed by the World Bank are commonly used) or specially-designed indexes (African Infrastructure Development Index, GEF Benefit Index). The following illustrates options for allocation criteria. It also shows that need and performance criteria can intersect.

***Option 1: Needs-based criteria***

Needs-based criteria often use indicators such as gross national income per capita (GNIpc), Human Development Index (HDI), and life expectancy to assess a country's development level and need for assistance. Countries with lower capacity to address domestic challenges and develop without aid are often considered to have a greater need. GNIpc is commonly used as an indicator of capacity.

While addressing the needs of countries is an important element in international financing mechanism, it is recognized that focusing solely on need may not result in the most effective use of resources. This is particularly evident in cases like "failed states," where addressing needs might not lead to effective outcomes. To take this into account, allocation formula also include performance criteria.

[145] Vikrant Panwar, *et al*., "Methodological guidance to determine the 'size' of premium and capital support (PCS) at macro level" (Advisory Report 2022), *ODI and InsuResilience Global Partnership*, p. 23.

[146] See, for example, IMF, "Monitoring the Performance of International Financial Institutions" (2007) *Global Monitoring Report* (available here, last accessed 8 October 2023); Trygve Ottersen, et al, "Development assistance for health: what criteria do multi- and bilateral funders use?" (2017), 12(2) *Health Economics, Policy and Law* 223-244; Trygve Ottersen, Suerie Moon, and John-Arne Røttingen, "Distributing development assistance for health: simulating the implications of 11 criteria" (2017), 12(2) *Health Economics, Policy and Law*, pp. 245-263; Sophie Smyth and Anna Triponel, *Funding Global Health.*

***Table 6: Examples of criteria in multilateral funding mechanisms[147]***

| *Criteria* | *Global Environment Facility, GEF Trust Fund* | *Green Climate Fund* | *Global Fund* | *World Bank, IDA* | *African Development bank, Special Development Fund* | *Asian Development bank, Special Development Fund* | *Caribbean Development bank, Special Development Fund* |
|---|---|---|---|---|---|---|---|
| ***Pre-allocation*** | | | | | | | |
| ***Catalytic investments*** | | | ● | | | | |
| ***According to priorities*** | ● | ● | | | | | |
| ***Criteria related to need*** | | | | | | | |
| ***Population*** | | | | | ● | ● | ● |
| ***GNI per capita*** | | | ● | ● | ● | | ● |
| ***GDP per capita*** | ● | | | | | | |
| ***Vulnerability*** | | ● | ● | | | | |
| ***Rural Population*** | | | | | ● | | |
| ***Criteria related to performance*** | | | | | | | |
| ***Alignment with NDCs, and/or other policy and frameworks*** | | ● | | | | | |
| ***CEPIA*** | ● | | | | | | |
| ***CPIA*** | ● | | | ● | ● | ● | ● |
| ***CIPE*** | ● | | | | | | |
| ***AIDI*** | | | | | ● | | |
| ***Portfolio/ Past-performance*** | ● | | | ● | ● | | ● |
| ***Criteria related to effectiveness*** | | | | | | | |
| ***Ratio of co-financing*** | | ● | | | | | |
| ***Expected rate of return*** | | ● | | | | | |
| ***Expected co-benefits*** | | ● | | | | | |

### *Option 2: Performance-based criteria*

Performance-based criteria try to measure the policy performance and institutional capacities in a country. The ability of a country to effectively utilize the provided funds and implement projects is assessed to ensure that resources are used efficiently. Performance-based criteria often use the World Bank Country Policy and Institutional Assessment (CPIA). The CPIA is an index that assesses the quality of a country's policies and institutional framework. The index evaluates various aspects of a country's governance, economic management, structural policies, social inclusion, and other factors.

### *Option 3: Additional, effectiveness and cross-cutting criteria*

In addition to needs and performance criteria, additional criteria are often considered. One option is additional cross-cutting criteria that do not focus on performance or needs. This ensures the allocation takes into account additional factors and help to align allocation with the goals of the mechanism. Cross-cutting criteria that are often considered include standard metrics such as population size. This criterion, while not directly linked to need or effectiveness, can influence the allocation to accommodate the size of a country's population. Another option is to consider the effectiveness of funding a country under a certain priority or programme. Effectiveness criteria can use different ways to measure effectiveness. For example, the expected positive return or co-benefits of funding a programme.

(iv) Weighting of Criteria

Many allocation mechanism employ weighting of the criteria. This involves assigning weights to each criterion to indicate its relative importance in the allocation process. This step ensures that different

[147] Adapted and expanded from table in Trygve Ottersen, Aparna Kamath, Suerie Moon, Lene Martinsen & John-Arne Rottingen, Development Assistance for Health: What Criteria do Multi- and Bilateral Funders Use (2017), 12 HEALTH ECON. POL'y & L. 223.

criteria have the appropriate influence on the final allocation. For example, if a mechanism increases the weight of the GDP index, this would in principle result in more allocation to lower income countries.

**Box 8. Options for Adoption and Review**

1. Consultation with stakeholders
2. Scientific expert input
3. Assessment of funding needs
4. Alignment with conventions
5. Collective decision making

In the context of allocating funding relating to plastic pollution, an allocation mechanism could be tailored to the objectives of the fees. In particular, pre-allocation into buckets that reflect priorities could be useful. This would ensure the different objectives of the Fee are served in the allocation process. This could also facilitate pooling the funds in the buckets with other funds (see below).

The allocation mechanism could follow international models to consider both need and performance criteria. Countries facing severe plastic pollution challenges might be prioritized based on their need to manage the issue. At the same time, evaluating the effectiveness of such funding for mitigating plastic pollution by taking into account the capacity of a country to address this challenge would be crucial for allocating resources efficiently. Additionally, the mechanism could consider criteria that are specific to the objectives of the Fee. For example, criteria that reflect the level of plastic production in a country or the existence of an EPR scheme. These criteria could influence the allocation negatively or positively, depending on which "bucket" or priority the fund, or parts of the fund, are aiming to support. For example, the existence of an EPR scheme may be considered positively when the fund aims to allocate funds under a priority that involves support for existing EPR.

### *2.4. Operational Aspects*

#### (i) Modes for Adoption and Review of Allocation

The allocation mechanism can be adopted at the moment the fund is established or at a later stage. They can be part of the treaty documents (e.g. annexes) or developed later as stand-alone decisions by the COP. Generally, the allocation formula and criteria are subject to periodic reviews and revisions based on lessons learned, changing priorities, and feedback from stakeholders. The adoption and review can involve a number of steps, summarized in Box 8 below.

For example, the GEF periodically reviews and updates its funding criteria to ensure they remain relevant and aligned with global environmental priorities. During the review, GEF engages with various stakeholders, including governments, civil society organizations, scientific experts and partner agencies, to gather feedback on the existing funding criteria. This process also involves assessment of environmental challenges and needs to inform the adjustments needed in the funding criteria to address emerging issues. The proposed changes to the criteria are discussed and voted upon by the GEF's assembly which includes representatives from recipient and donor countries.

#### (ii) Modes of Implementation

To execute funding, funding mechanisms can choose between different modes of implementation. Two common options are implementing agencies and direct access.

***Option 1: Implementing agencies***

In this approach, international funding mechanisms, like the GEF, partner with specialized organizations to manage and execute projects on their behalf. These organizations are referred to as "implementing agencies." They have expertise in various sectors, such as environmental conservation, sustainable development, and climate change adaptation.

For example, GEF collaborates with United Nations agencies (e.g., UNDP, UNEP), international financial institutions, and other organizations to implement projects that align with GEF's priorities. Implementing agencies provide technical assistance, project management, and capacity-building support to recipient countries. Once the proposals are approved by the GEF, the funds are disbursed to the relevant implement agencies responsible for project execution, financial management and reporting.

***Option 2: Direct access***

Direct access allows recipient countries to directly access funding and manage projects themselves, by-passing intermediaries. International mechanisms, like the Green Climate Fund (GCF), empower countries to develop and implement projects that align with their own priorities and capacities. For instance, GCF's direct access modality enables national designated authorities or accredited entities within recipient countries to propose and manage projects.

## Section C - The Role of the Differentiation Principles

In international environmental law, States have consistently recognized that developing countries have different needs, capabilities and responsibilities from developed countries, and that these differences must be taken into account when formulating and implementing MEAs.

This is expressed in two key principles. The first acknowledges that priority must be given to the special situation and needs of developing countries, and in particular the least developed and most environmentally vulnerable countries. The second recognizes that countries, generally, have common but differentiated responsibilities and respective capabilities (CBDR-RC) with respect to environmental degradation. This is because of their different responsibilities and different contributions to that degradation through industrialization and, as a result of these different development pathways, their different capabilities to tackle the degradation.

The recognition and implementation of these two principles in MEAs have played an important part in securing the support and commitment of developing countries for participating in MEAs, and for ensuring the means to implement MEAs effectively. While common global rules or targets may in some cases be the most effective pathway to protect the interests of vulnerable and developing countries, the application of these principles have allowed for differentiated requirements and/or implementation schedules for global rules or targets, as well as additional financing and support.

This section explores the relevance of these differentiation principles for the design of the Instrument, and, in particular, in the context of the Fee. By ensuring that effective support is provided to developing countries, the Fee may enable these countries to accept more rigorous global control measures. This, in turn, may help to meet the Instrument's objective of ending plastic pollution.

### 1. The Origins of the Special Needs and CBDR-RC Principles

Differentiation in favour of developing countries is present throughout modern international environmental law, which began with the Stockholm Declaration of the United Nations Conference on the Human Environment (1972) (Stockholm Declaration). The Stockholm Declaration recognizes the need to take into account the particular circumstances of developing countries when making resources available for the preservation of the environment.[148] The Declaration also expressly recognizes the need for support for developing country actions towards achieving common environmental objectives.[149]

In the 50 years since the Stockholm Declaration, differentiation to account for the special needs and circumstances of developing countries has been a constant feature of international environmental law. As the Table 7 below shows, the two principles underlying differentiation are both reflected across MEAs, often both in the same legal instrument.

The Rio Declaration on Environment and Development (1992) (Rio Declaration) identified the two differentiation principles in consecutive paragraphs of the Declaration. In Principle 6, the Rio Declaration calls for "special priority" to be given to the "special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable"; the provisions adds that "[i]nternational actions in the field of environment and development should also address the interests and needs of all countries." For technical, financial or political economy reasons, those developing countries may need international action to address effectively their environmental concerns.

In Principle 7, the principle of CBDR-RC was formally expressed for the first time: "[i]n view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the

[148] Stockholm Declaration, Principle 12.
[149] Stockholm Declaration, Principle 9.

international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command."

Thus, countries have *common* responsibilities to address global environmental degradation. Reflecting their common responsibilities, Principle 7 requires States to "cooperate in a spirit of global partnership" to address global environmental degradation, which they can do by developing global rules in an MEA. At the same time, the responsibilities are *differentiated* among countries, because of their different contributions to environmental degradation, and their different technological and financial abilities to address the degradation. As a result, global rules in MEAs to address effectively global environmental degradation often differentiate in favour of developing countries, including through different implementation schedules, and financial and/or technical support to enable full treaty implementation.

It is worth noting that the approach to differentiation has evolved over time, becoming more nuanced and flexible in light of the particular circumstances facing countries (or groups of countries). Initially, with respect to CBDR-RC, developing countries were typically treated as a part of a single group for purposes of differentiation, as compared with all developed countries.[150] Today, it is recognized that developing countries differ from each other with respect to their respective contributions to environmental degradation, their responsibilities and capabilities for tackling it, and their vulnerabilities to the consequences. As a result, CBDR-RC has become a more nuanced and flexible principle, which allows developing countries themselves to be differentiated across a spectrum.

As shown in Table 8, the principles of differentiation are expressly reflected in many MEAs; and, when not, prioritization and differentiation in favour of developing countries is still reflected, through various mechanisms, including implementation schedules and finance mechanisms. Differentiation is also a feature of other areas of international law, including, for example, the UN Convention on the Law of the Sea and the covered agreements of the World Trade Organization.

[150] The high-water mark of this approach was the Kyoto Protocol (1997) of the UNFCCC (1992), which placed all of the responsibilities for climate change mitigation on developed countries, with none on developing countries. This approach proved to be unacceptable to developed countries. As a result, the Paris Agreement (2015), adopted to enhance the implementation of the UNFCCC, introduced a new formulation of the principle: CBDR-RC, "in the light of different national circumstances".

***Table 7: Overview of differentiation principles in Stockholm and Rio Declarations and selected MEAs***

| Instrument | Principle of Special Needs and Circumstances | Principle of CBDR-RC |
|---|---|---|
| **Stockholm Declaration (1972)** | Origins of the principle, without express stipulation.<br>In efforts to preserve the environment countries should take "into account the circumstances and particular requirements of developing countries".[151] | Origins of CBDR, without express stipulation.<br>Financial and technical assistance is required to supplement domestic efforts of developing countries in the pursuit of environmental objectives.[152] |
| **Montreal Protocol (1987)** | The Preamble recognises that special provision is required to meet the needs of developing countries.[153] | No express stipulation, but differentiated timetable of implementation and financial support for implementation of developing countries, through a multilateral fund.[154] |
| **Rio Declaration (1992)** | Expressly mentioned in Principle 6: special priority shall be given to the special situation and needs of developing countries, in particular least developing countries and those most environmentally vulnerable.[155] | CBDR-RC expressly mentioned in Principle 7. Responsibility in the pursuit of sustainable development is shaped in the view of the pressure developed countries place on the global environment and of the tech/financial resources available.[156] |
| **United Nations Framework Convention on Climate Change (UNFCCC) (1992)** | Article 3 references consideration of the "specific needs and special circumstances" of developing countries, especially those that are "particularly vulnerable" to the adverse effects of climate change, and should not have to bear "a disproportionate or abnormal burden". | CBDR-RC expressly mentioned in the preamble, in Article 3.1 as a principle, and in Article 4 as a qualification to commitments.<br>The extent of implementation by developing countries depends on receiving financial and tech transfers, to cover the "full incremental costs". |
| **Convention of Biological Diversity (1992)** | The Preamble recognises the "special conditions of the least developed countries and small island States".<br>The Convention also requires the establishment of research, education and training programs in light of the special needs and special situation of developing countries, and the provision of funding and technology transfers taking into account the specific needs and circumstances of least developed countries.[157] | CBDR-RC not expressly mentioned but differentiation reflected: need for financial and other support to ensure implementation of treaty commitments by developing countries.[158] |

[151] Stockholm Declaration, Principle 12.
[152] Stockholm Declaration, Principle 9.
[153] Montreal Protocol, Preamble.
[154] Montreal Protocol, Article 5.
[155] Rio Declaration, Principle 6.
[156] Rio Declaration, Principle 7.
[157] Convention of Biological Diversity, Preamble, Articles 12 and 20.
[158] Convention of Biological Diversity, Articles 8(m), 9(e), 20.

| Instrument | Principle of Special Needs and Circumstances | Principle of CBDR-RC |
|---|---|---|
| **Paris Agreement (2015)** | Preamble expressly recognises the "specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change".<br>Principle is reflected in specific commitments:<br>• Implementation of mitigation measures must "take into consideration concerns of Parties with economies most affected by the impacts of response measures, particularly [developing countries]".<br>• In adaptation efforts, consideration of developing countries "particularly vulnerable to the adverse effects of climate change".[159] | CBDR-RC mentioned expressly, with the addition of the words "in the light of different national circumstances", in the preamble, as a principle, and in qualifying specific commitments.<br>CBDR-RC is reflected in the specific commitments:<br>• Developed countries "taking the lead" in mitigation efforts (NDCs).<br>• Financing and tech transfers must cover mitigation, adaptation, loss and damage.[160] |

[159] Paris Agreement, Articles 4.15 and 7.2.
[160] Paris Agreement, Articles 4.4 and 10.

2. Implementing the Differentiation Principles with regard to the Fee in the Instrument

The Special Needs and CBDR-RC principles are concerned with the particular circumstances, challenges, and environmental vulnerabilities that developing countries face in tackling environmental degradation.

The principle of special needs and circumstances is premised on the fact that developing countries, and in particular least developed and small island states, are disproportionately exposed to the adverse effects of environmental degradation, and face more urgent needs to effectively tackle these adverse effects. In the case of plastics, this is true due to the vast exportation of plastic products and plastics waste to developing and least developed countries,[161] and the lack of infrastructure to collect and manage this waste in a safe and environmentally sound manner,[162] enabled by the lack of common global requirements to tackle plastic pollution.[163] The resulting high leakage of plastic waste in developing countries results in numerous adverse effects on human health and the environment, which magnify pre-existing vulnerabilities.[164] This reality strongly supports the urgent need to support developing countries in the Instrument, which virtually all participants in the negotiations recognize.

This support could be premised on either the special needs principle or CBDR-RC. It could even be based on both in tandem. CBDR-RC is relevant when developing and developed states have made different contributions to environmental degradation through their different levels of industrialization; and, as a result of the different levels of economic development resulting from that industrialization, having different capacities for tackling that degradation. In the case of plastics, given their different level of development, countries have different capabilities to address plastic pollution. Moreover, countries may also have different responsibilities for causing plastic pollution. For example, if developed countries, and other countries with early rates of industrialization, have disproportionately produced (or produce) the plastics that pollute the environment, this would also support the case for CBDR-RC in the Instrument.

In relation to the Fee specifically, the principles of differentiation could be reflected in the following four ways under the Instrument to differentiate and prioritize in favour of developing countries:

1. **Redistributed share**: a higher share (or all) of the redistributed revenues could benefit *developing countries generally*, as compared to developed countries;

2. **Redistributed share**: a higher share of redistributed revenues could benefit *producing developing countries*, as compared to other developing countries;

3. **Retained share**: a higher share of the revenues could be retained by *producing developing countries*, as compared to the share retained by producing developed countries.

4. **Fee level**: a lower Fee could be imposed on *producers in developing countries*, as compared to the Fee imposed on producers in developed countries; and

These options could be cumulative or alternative. Under each option, the level of differentiation in favour of the group of beneficiary developing countries could be **graduated** in the light of the different needs,

[161] See Alberto Agnelli and Piera Tortora, "The role of development co-operation in tackling plastic pollution. Key trends, instruments, and opportunities to scale up action" (OECD 2022), *Environment Working Paper No. 207*, (available here, last accessed 8 October 2023) (hereafter "Alberto Agnelli and Piera Tortora, *The role of development co-operation in tackling plastic pollution*"). Since 1988, East Asian and Pacific countries have imported 75% of all plastic waste traded globally, while OECD countries contributed 64% of all exports.
[162] According to the OECD Global Plastics Outlook Database, in non-OECD countries 39% of the plastic waste is mismanaged or uncollected, compared to only 6% in OECD countries. See OECD, "Global Plastics Outlook" (available here, last accessed 8 October 2023).
[163] Karasik, R. et al., "20 Years of Government Responses to the Global Plastic Pollution Problem The Plastics Policy Inventory" (2020) (available here, last accessed 8 October 2023).
[164] See Alberto Agnelli and Piera Tortora, *The role of development co-operation in tackling plastic pollution*.

responsibilities, and capabilities of the beneficiary countries, as relevant to the particular type of differentiation.

The differentiation need not be static, but could be **dynamic** and updated over time as needed, to reflect the evolving needs, responsibilities and capabilities of the country groupings and/or to adapt the criteria on which differentiation is based.

Table 8 below indicates the potential benefits and drawbacks of differentiation for each option.

***Table 8: Potential options for differentiation***

| # | Type of Differentiation | Advantages | Challenges |
|---|---|---|---|
| 1. | **Higher share (or all) of redistributed revenues to benefit developing countries** | Redistributed revenues are used to support developing countries that lack resources to implement the Instrument. Differentiation could account for the particular needs and circumstances of beneficiary countries. | Potential differences in view as between developed countries and certain major developing countries, if the latter sought (large) share of redistributed revenues. Potential differences in view could be reduced if differentiation among developing countries (graduation). |
| 2. | **Higher share of revenues redistributed to benefit producing developing countries** | Would offset economic costs of Fee through enhanced and accelerated treaty implementation; would support economic development; and the revenues could be used to transition to a more sustainable plastics economy (functioning as externally administered subsidies). | Would reduce the available redistributed revenues to assist non-producing developing countries.<br>Potential differences in view as between producing developed countries and certain major producing developing countries, if the latter sought a larger share of redistributed revenues.<br>Potential differences in view as between producing developing countries and other developing countries, because the former would have a greater entitled to the redistributed revenues. |
| 3. | **Higher share of retained revenue for producing developing countries** | Higher fiscal return for producing developing countries would offset economic costs of Fee; and would support economic development.<br>The revenue could enable (or be earmarked for) the beneficiary countries to support a transition to a more sustainable and competitive plastics economy (i.e., provide resources for subsidies, which producing developed countries can grant to support the transition). | Would reduce the available collected revenues to assist developing countries in meeting the costs of treaty implementation.<br>Potential differences in view as between producing developed countries and certain major producing developing countries, if the latter sought a larger retained share.<br>Potential differences in view as between producing developing countries and other developing countries (although less so than Option 2), because the former benefit more from the Fee than the latter. |
| 4. | **Lower Fee imposed on producers in developing countries** | Lower Fee to diminish the impact on economic development; the Fee still serves the Instrument's goals, differentiated to mitigate development impact. | May compromise the level playing field for producers across the globe. May induce companies to move production to countries charging lower fees and ultimately reducing the effectiveness of the Fee. |

## Section D -- Treaty Integration

This section addresses the way in which Fee requirements would be integrated into, or alongside, the broader Instrument.[165] The focus lies on four key elements related to integration into the Instrument: (1) the legal force of requirements relating to a Fee; (2) the form of integration into or alongside the Instrument; (3) the need for parties to provide for the development and oversight of the Fee mechanism over time (e.g. through the COP); and (4) how parties might curtail "free-riding" by countries that do not ratify and adopt the Instrument and/or implement the Fee.

### 1. Legal Force: Binding or Non-Binding

Parties have the option to make requirements related to the Fee binding or non-binding. For example, the parties could include binding provisions that require every party with relevant production to adopt a Fee mechanism. Alternatively, the parties might set out substantively equivalent but optional requirements that are subject to separate, voluntary implementation by individual parties (for example, on an "opt-in" or "opt-out" basis). In the latter case, only those parties that have ratified the specific Fee requirements would be subject to the relevant requirements.

The decision by parties to adopt either binding or non-binding Fee requirements would impact both the effectiveness of the Fee as well as corresponding objectives of the Instrument (see Box 1). Advantages and disadvantages of this decision are identified in Table 9.

With these factors in mind, the adoption of binding Fee requirements is recommended, as proposed under the Zero Draft.[166] The binding character is more likely to make the Fee effective and, thus, to further the objectives of the Instrument. Specifically, the benefits of full implementation amongst parties, in particular the stable and likely higher Fee revenue base and more even playing field, outweigh the advantage of a potentially more easily negotiated but less widely adopted set of non-binding requirements. To achieve the acceptance of a binding Fee, parties may wish to pay particular attention to incorporating nuance that accounts for differences in circumstances between parties (discussed in section C, above); and to processes that would allow the Fee mechanism to evolve over time (see section 2, below).

[165] This is based on the assumption that the Fee would apply to plastic polymers.
[166] Zero Draft, Section III.1 (Financing).

***Table 9: Advantages and disadvantages of binding and non-binding Fee requirements***

| | Binding Fee requirements | Non-binding Fee requirements |
|---|---|---|
| **Advantages** | • Parties required to adhere to agreed rules.<br>• Increases predictability and likely higher revenues from all parties subject to requirements.<br>• Would facilitate conclusion of other provisions on financing, and on control measures, to have binding Fee mechanism.<br>• Maintains a level playing field between all plastic producing parties. | • Easier to achieve agreement among all parties to adopt non-binding Fee mechanism.<br>• Parties may be willing to agree to more ambitious Fee mechanism that is not binding.<br>• May offer greater flexibility for parties to adopt alternative measures specifically suited to their jurisdictions. |
| **Disadvantages** | • May be more difficult to achieve agreement amongst all parties to adopt binding requirements.<br>• Achieving broad consensus may result in lower-ambition requirements. | • Limited implementation would result in lower Fee mechanism impact, making a more limited contribution to Fee objectives and to broader objectives of the Instrument.<br>• Less predictable and likely lower Fee revenues.<br>• More demanding requests for traditional funding sources.<br>• Limited implementation could result in competitive disadvantages to plastic producing parties imposing the Fee.<br>• A lack of widespread uptake could create a disincentive for further uptake. |

2. <u>Form: Treaty Provisions, Annex Provisions, Protocol</u>

Potential options for integrating the Fee requirements include:

1. Integration into the treaty text of the Instrument, with modalities developed by the governing body;

2. Integration into the treaty text and a treaty annex of the Instrument; or,

3. Integration into a protocol to the main treaty (the Instrument).

The Zero Draft proposes the integration of the Fee requirement into the treaty text (Option 1), with modalities and procedures for implementation thereof to be developed by the governing body, after adoption of the Instrument (e.g., in relation to Fee rate; allocation criteria). The advantage of this approach is that the requirement to impose the Fee applies to all parties that have ratified the Instrument, but that the modalities are left to the governing body. This leaves sufficient flexibility to develop, and adapt over time, the modalities of the Fee.

Annex Technical Elements

Table 10 below assesses the options against the following five factors:

a) The form of integration relative to the Instrument;

b) The timing of conclusion of the Fee requirements, which could be at the time of the Instrument's conclusion or later;

c) The scope of parties participating in the conclusion of the Fee requirements, which might necessarily involve all parties to the negotiations (i.e., in the case of integration into the treaty text or annex); those that have ratified the Instrument (i.e., in the case of a subsequent protocol); or a subset of parties (i.e., in the case of a side agreement);

d) The legal force of the Fee provisions, which parties could be binding or non-binding, as discussed above;[167]

e) The ease of modifying the Fee requirements over time, which could be useful to allowing certain aspects of the Fee requirements to evolve with changing conditions. Parties may find, for example, that it is appropriate to introduce regular review and modification capacities in relation to the levels at which the Fee is set, in light of its impact on plastics pollution over time; and, to the redistribution of funds.

[167] With respect to legal force, while parties should consider adopting binding Fee provisions, for completeness, the table includes options that cover the incorporation non-binding requirements.

***Table 10: Comparison of treaty integration options***

| # | Option | Form of Integration | Timing | Participation | Legal Force | Modification over Time |
|---|---|---|---|---|---|---|
| 1. | **Treaty text plus governing body decisions** | Integration of the requirement to impose the Fee into the main body of the text alongside other treaty provisions; with modalities of the Fee to be developed the government body. (This option is proposed by Zero draft.) | Agreement to impose Fee at the time of overall treaty conclusion; modalities to be developed afterwards by the governing body. | Requires agreement of parties negotiating the treaty on the requirement to impose the Fee. | Binding provisions would apply to all parties that have ratified the treaty.<br><br>Non-binding provisions would be voluntary, either on an opt-in or opt-out basis. | The requirement to impose the Fee could be modified only through treaty amendment.<br><br>The governing body is mandated to adopt decisions relating to the application of the treaty, allowing for a degree of flexibility (e.g., in relation to Fee rate; or allocation criteria); which could be modified, over time, by the same governing body. |
| 2. | **Treaty plus annex** | The provisions relating to the Fee would be divided between the treaty and an annex. The treaty would likely include minimal details, establishing the Fee, as set forth in the annex. The annex would include detailed provisions setting out the modalities of the Fee. | At the time of overall treaty conclusion, both on the requirement to impose the Fee, and its modalities. | Requires agreement of parties negotiating the treaty on the requirement to impose the Fee and its modalities. | Same as cell above. | The requirement to impose the Fee could be modified only through treaty amendment; the modalities through amendment of the annex (more difficult than under Option 1). |
| 3. | **Protocol** | The protocol would supplement the main treaty, serving as a dedicated instrument addressing the Fee. | Could be concluded at the time of main treaty conclusion; or, subsequent to the main treaty. | Requires agreement of treaty parties. | Binding on all parties that have ratified the treaty.<br><br>Alternatively, in the case of an optional protocol, binding on parties that have ratified the protocol. | Likely subject to similar modification procedures as main treaty. |

### 3. Role of the COP

As discussed above in Table 10 above, parties might seek to establish mechanisms that would allow aspects of the Fee to evolve over time. The Zero Draft takes this approach.

Some of aspects that could evolve over time include: the Fee administration scheme; the level of the Fee; oversight of the Fee mechanism; the relative retained and redistributed shares; priorities and guidelines for the use of the redistributed revenues; criteria for the allocation of revenues; and review and monitoring of compliance.

Parties may consider giving the COP the responsibility for considering how aspects of the Fee mechanism would evolve over time, with COP decisions being either binding or non-binding. This approach would align with existing MEAs, where the respective COPs oversee the implementation of the treaties, typically through decisions taken at periodic meeting.[168]

### 4. Prevention of Free Riding in Limited Ratification Scenarios

As part of their assessment of a Fee mechanism, parties might also seek to consider options for addressing the risk of "free-riding", which arises if only a subset of countries producing plastic polymers agree to impose the Fee.[169]

In that scenario, the producers of plastic polymers in other "non-Fee-imposing" countries would not be subject to the Fee. This would mean that these producers in these countries would not contribute, under the Instrument, to addressing pollution costs caused by their products. This uneven imposition of the Fee would confer a competitive advantage on producers in non-Fee-imposing countries, by making their production of plastics less costly – they would free-ride on the Fee paid by their competitors. The possibility of escaping the Fee, and enjoying a competitive advantage, if not countered, could persuade some producing countries not to agree to an Instrument including the Fee.[170]

To counter the possibility of free-riding, Parties could impose a border adjustment, or other border charge, to require importers of plastics and plastic products from non-Fee-imposing countries to pay an import duty equivalent to the Fee. This measure would aim to counter the benefits of free-riding just described, at least in countries that are party to the Instrument.[171]

A border adjustment, or other border charge, would raise certain challenges, both practical and legal. In practical terms, the Fee would be imposed on plastic polymers, likely based on weight and, possibly, varying by polymer type in the case of differentiation (eco-modulation or exemption). In contrast, much of the plastic traded involves downstream processed products, often products that incorporate plastics and other materials (e.g., consumer electronics; household goods; toys; capital goods; food and beverages, clothes). Thus, the ability to make an effective adjustment would require reliable information on the weight of the plastic polymers integrated into a product and, as relevant, by polymer type. However, as the Instrument will likely require products to be accompanied by considerable information on their plastic content, this information is likely to be routinely available.

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[168] For example, in the United Nations Convention to Combat Desertification, the COP has oversight powers over a Global Mechanism facilitating the mobilization of financial resources to implement the Convention. In the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the COP is tasked with reviewing the implementation of the Convention including through amendments to the list of species in the relevant appendices.

[169] This could occur if the Fee requirements are ratified by only a subset of parties, as contemplated in Table 10, above; or if certain producing countries did not ratify the Instrument at all.

[170] The extent of the incentive to free-ride would likely depend on the amount of the Fee. A higher level of Fee is more likely to prompt an incentive to escape the charge.

[171] In non-Fee-imposing countries, and other non-Parties, it would not be possible to counter the benefits of escaping the Fee. In those markets, producers of plastic polymers in "non-Fee-imposing" countries would enjoy a competitive advantage, as compared with producers of plastic polymers in Fee-imposing countries.

Annex. Technical Elements in Detail

In legal terms, a border adjustment, or other border charge, would need to be acceptable under World Trade Organization (WTO) rules. There is, though, a clear pathway for ensuring consistency with WTO rules.

We see, at least, three scenarios:

- A **first scenario** involves the case of a country importing plastic polymers that has its own domestic polymer production, and charges the Fee on that production.
- A **second scenario** arises in the case of a country importing plastic polymers that lacks domestic polymer production.
- A **third scenario** arises in the case that a country importing downstream products incorporating plastic polymers, whether or not the country produces polymers or the downstream products.

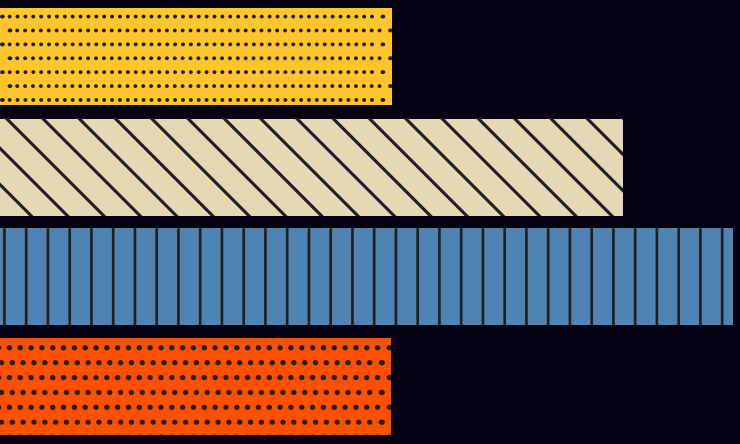
In the **first scenario**, a border adjustment could be applied to any imported polymer that has not borne an equivalent charge in a third country. Such an adjustment would be regarded as forming an integral part of a so-called "internal" tax or charge under the General Agreement on Tariffs and Trade 1994 (GATT 1994).[172] In that event, the adjustment would be consistent with WTO rules on non-discrimination, provided that the level of the adjustment is equivalent to the level of the Fee borne by domestic polymers.

In the **second and third scenarios**, a border charge to account for the plastic pollution fee could be applied to the extent that the imported product has not borne an equivalent charge in a third country. In that case, it is unlikely that the border charge would be part of an "internal" charge. Instead, it would likely be treated as a border or import charge under WTO law. Although the charge would likely be contrary to WTO rules on the level import charges,[173] it could readily be justified as a measure that protects public health and the environment (by charging an internationally-agreed plastic pollution fee), provided that the level of the charge does not exceed the amount of the charge foreseen under the Instrument, properly accounting for the plastic polymers imported directly or incorporated into an imported product.

[172] Internal taxes and charges that apply to both domestic and imported products in equivalent manner are considered "internal", even if they are even if "collected or enforced in the case of the imported product at the time or point of importation" according to Ad Article III, General Agreement on Tariffs and Trade 1994 (GATT 1994).

[173] Article II of the GATT 1994 limits import duties and similar charges to the level set out in the imposing country's schedule of WTO commitments on goods. WTO Members must not impose import duties in excess of the bound level, absent a justification (e.g., to protect public health or the environment).

# THE PLASTIC POLLUTION FEE



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