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Financing Options for the Global Plastics Treaty

Analysis Papers

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ANALYSIS OF A GLOBAL PLASTIC POLLUTION FEE

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ABBREVIATIONS AND SYMBOLS

CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
EU	European Union
GEF	Global Environment Facility
GPPF	Global Plastic Pollution Fee
ICAO	International Civil Aviation Organization
INC	Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution, including in the marine environment
IOPC Funds	International Oil Pollution Compensation Funds
MEA	Multilateral Environmental Agreement
ODA	Official Development Aid

1. BACKGROUND: FINANCING THE GLOBAL PLASTIC TREATY

Negotiations of the Intergovernmental Negotiating Committee (INC) to develop an international legally binding instrument on plastic pollution, including in the marine environment[1], are entering the final round (INC-5.2). From August 5 to 14, states gather in Geneva, Switzerland, to conclude the negotiations on what is also labelled the Global Plastic Treaty. Like in most multilateral environmental agreements (MEA), the financing package has been and will be a crucial issue in these negotiations, including questions on the sources, scope and uses of financing.

Reliable and sufficient financing is critical for an effective implementation of any MEA. The future Global Plastic Treaty is no exception. On the one hand, current estimates suggest that achieving the treaty's objectives and fostering the transition towards a more sustainable and circular plastics economy will require substantial financial resources.[2] On the other hand, these estimates also suggest what has already been widely acknowledged: resources for treaty implementation are unequally distributed among countries and many, in particular developing countries are in urgent need for substantial financial resources since they lack the necessary institutional, administrative, and technical capacities to implement future treaty obligations (see also UNEP 2024a). Therefore, the combat of plastic pollution, like any other response to a common global environmental challenge, requires mutual financial support and assistance that takes into account all available financing sources and measures to align and redirect financial flows, public and private, domestic and international.

Despite this broad agreement on the need of financial resources, eventually agreeing on a fair and effective financing package can however be challenging. Related negotiations usually involve intense political, often even highly politicized debates as well as very complex technical discussions over the specific design and provisions of the package and individual financing options. This is also underscored by the decision at INC-4 in Ottawa, Canada, to establish and mandate an "ad hoc intersessional open-ended expert group to develop an analysis of potential sources, and means that could be mobilized, for implementation of the objectives of the instrument, including options for the establishment of a financial mechanism, alignment of financial flows, and catalysing finance, for the consideration by the Committee at INC-5"[3].

This analysis of a Global Plastic Pollution Fee (GPPF), serves to facilitate a common understanding and interpretation of a GPPF. By providing an objective, independent and solution-oriented input to the INC discussions on the GPPF, the deep dive seeks to promote a solution-oriented negotiation process and to enable negotiators to discuss and agree on a best possible outcome for the mobilisation, provision, access and effective use of financial resources for the implementation of the Global Plastic Treaty.

The deep dive is divided into four parts: the first part elaborates on the essentials and functionality of a GPPF, the second part discusses basic options for design and for the incorporation of a GPPF into the Global Plastic Treaty, the third part sheds light on how a GPPF contributes to financing and how it affects financial flows, and the fourth and last part provides brief examples for comparable global or international fees.

1 UNEP/EA.5/Res.14: End plastic pollution: towards an international legally binding instrument, paragraph 3.

2 The most comprehensive, recent and sound estimates on costs to combat plastic pollution with ambitious global and domestic policies and possible savings when compared to business-as-usual scenarios are provided in OECD (2024), Nordic Council of Ministers (2023), UNEP (2023), OECD (2022) and PEW (2020).

3 UNEP/PP/INC.4/5: Report of the intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of its fourth session, paragraph 91(a).

2. HOW IT WORKS[4]

The GPPF shifts the responsibility for covering plastic pollution costs to polluters. A GPPF obliges certain actors to pay a domestic fee on the plastics and plastic products they put on the market. The revenues are channelled to a designated body that uses the funds to finance the reduction of plastic pollution across the globe. In the original proposal by the Republic of Ghana prior to INC-2 in Paris, France (Republic of Ghana 2023), and in the current draft text for the Global Plastic Treaty (UNEP 2024b), it is proposed to charge the fee on plastic producers, i.e. of producers of primary plastic polymers. Alternatively, it could also be charged and collected from any other actor in the plastic supply chain, e.g., companies that manufacture plastic products or put plastics and plastic products on the market like those in the fast-moving consumer goods industry or the retail.

The GPPF can contribute in two ways to a reduction of plastic pollution. As financing instrument, it can be used to fund solutions to plastic pollution, i.e. products, processes, behaviours, actions and/or activities that *reduce* plastic pollution. As economic instrument, it can be used as disincentive that makes financing plastic pollution (i.e. products, processes, behaviours, actions and/or activities that *contribute* to plastic pollution) more expensive and thus less attractive and competitive than financing solutions.

Ultimately, the GPPF puts into practice the prominent "polluter pays" principle that was adopted as principle 16 of the 1992 Rio Declaration on Environment and Development.

3. HOW IT CAN BE DESIGNED

3.1. Incorporation in the Global Plastic Treaty

In the current treaty draft, the provision on the GPPF obliges countries to introduce and collect a pollution fee from plastic producers and, if adopted, would thus introduce a mandatory fee. In this case, the fee would be implemented with the same design in each country. In principle, negotiators could also decide to oblige other actors to pay the pollution fee (see above). Another option would be a voluntary GPPF. In this case, each country would be free to decide whether to introduce such a fee and how to design it. In the view of those states that support a provision on a GPPF in the Global Plastic Treaty, a mandatory fee will be more effective, provide more stable and predictable revenue streams and create a level playing field for the targeted actors and, thus, minimise competition distortions through highly divergent plastic pollution fees across countries, like they would probably spread in case of a voluntary GPPF.

A third option could be modelled on European Commission's Plastics Own Resource, which was introduced in 2021 (EC 2024), and oblige governments to pay the plastic pollution fee that could then, but need not to request reimbursements of the costs from domestic polluters. In Europe governments of European Union (EU) member states (and not any actors in the plastic value chain) have to pay € 800 per ton of plastic packaging waste that is not recycled. They are however free to decide whether they pass on the costs to polluters by obliging them to pay a similar or comparable fee of which the revenues cover the governments' payments.[5] Thus, it leaves it to each member state how it finances its pollution fee. This could similarly work in the context of the Global Plastic Treaty. The related provision could oblige governments to pay a pollution fee on the basis of an agreed formula, like for example the market share of each country in global plastic production, but leaves it open to the affected governments whether they oblige polluters in their country to reimburse the costs of that fee.

4 This and the subsequent sections largely draw on two studies by the Minderoo Foundation that have been and still are pivotal in fleshing out the design of a GPPF, elaborating its potential and possible uses, and assessing its costs and revenues (Minderoo Foundation 2023 and 2024).

5 Currently, Spain introduced a plastic tax in response to the European plastic levy, Italy is planning to do so and the Netherlands and Germany are examining whether to introduce a national plastic tax to finance the European plastic levy.

As regards the more specific design of the GPPF that will be discussed in the next section, all current proposals suggest to postpone decisions on the various design options and exact modalities to a later stage in the process.

3.2 Specific design options

When it comes to the specific design of the GPPF, negotiators and decision-makers will face many more choices between different options along at least five core elements, of which only the most important can be discussed here: 1) targeted actors, 2) fee level, 3) fee collection, 4) revenue allocation, and 5) operation and governance.

3.2.1 Targeted actors

In principle, a GPPF can be imposed on any actor in the plastic value chain, be it producers, manufacturers, retailers, consumers or waste management operators. The supporters of a GPPF prefer to oblige plastic producers to pay the fee. In their view, their relatively small number and high concentration in a limited number of countries would facilitate a smooth and effective implementation of the fee, namely it would better avoid free riding and decrease the administrative burden and costs, including collection and enforcement costs. In addition, it would most closely follow the "polluter pays" principle and probably lead to a reduction of primary plastic polymers that enter the market and, thus, reduce potential plastic pollution from the very first stage of the plastic supply chain onwards.

3.2.2 Fee level

In general, the fee level depends on whether the GPPF would be mainly used as financing instrument to fund different solutions to reduce plastic pollution or as economic instrument to disincentivise the flow of financial resources to plastic pollution. If used as financing instrument the revenues from the fee could cover a certain share of or even all costs for the envisaged expenditures for solutions to reduce plastic pollution, such as investments in waste management infrastructure, the support of reuse and refill systems, the promotion of sustainable alternatives to plastics and plastic products and the removal of legacy plastic waste. If used as economic instrument and disincentive the fee level needs to send a sufficiently high price signal to the market that discourages business actors in the plastics value chain to engage in products, processes, behaviours, actions and/or activities that contribute to plastic pollution and encourages them to engage in solutions that reduce plastic pollution.

The basis to determine the fee level can be the weight or the relative value of the plastics and plastic products on which the fee is charged. In addition, the fee can be modulated so that fees for polluting products, processes, behaviours, actions and/or activities are higher than fees for those that are more sustainable and circular, thereby incentivising a shift away from the former to the latter. As possible basis for such modulation current proposals name type of feedstock and polymer, environmental and health issues during use, and/or harmfulness throughout the life cycle.

3.2.3 Fee collection

Two options exist for fee collection. The collection can be carried out by a designated national public authority (an existing or a new one). Alternatively, an independent third body at the national or international level can be tasked with fee collection. Current proposals opt for a collection through a designated national public authority.

3.2.4 Revenue allocation

Three basic decisions have to be made when it comes to revenue allocation.

First, it needs to be decided how much of the revenue can be retained by the country where the fee is collected. The country could only retain the share that covers its costs for administration, collection and enforcement of the fee. Or, in addition, the country could also retain revenues for its implementation of and compliance with the Global Plastic Treaty.

Second, it needs to be decided whether and how the revenue is distributed to other countries and for what funding purposes. To this end, and like in the case of the financial mechanisms and fund(s) of MEAs, criteria for eligible countries and funding purposes need to be defined. In terms of countries, the current discussions feature developing countries, least developed countries, economies in transition, countries in need of technical assistance and small island developing states as eligible countries. In principle, any country can be eligible since negotiators are free to decide on country eligibility criteria. In terms of funding purposes, the revenues can – again in principle – be used for any conceivable costs that arise from the implementation of and compliance with the Global Plastic Treaty and across the entire plastic life cycle as it is up to the negotiators to define eligible funding purposes. What costs are actually covered (or not covered) also depends on what costs are covered (and not covered) by the financial mechanism and other domestic and international financing options, like Official Development Aid (ODA), taxes and subsidies.

Third, it needs to be decided through what process the revenues are allocated. Here, the currently discussed options are to allocate the financial resources based on a pre-defined formula, formal application processes, competitive bidding, needs assessment or strategic priorities.

3.2.5 Operation and governance

Three design choices are relevant here.

First, it needs to be decided who governs the GPPF (and is responsible for the distribution and use of revenues). Like in the case of financial mechanisms of MEAs, two options exist. The fee could be governed by a newly created independent body (or bodies) or by an already existing body (or bodies) within an existing arrangement. The number of bodies depends on the complexity and number of different funds that receive revenues from the GPPF. This body or bodies can operate at regional or global levels and be run by public or private actors. This also includes a decision on whether the implementation of any funding activities is the responsibility of the body that runs the GPPF or whether it is delegated to implementing agencies, like under the Global Environment Facility (GEF).

Second, it needs to be decided who monitors, supervises and, if necessary, enforces the GPPF. Again, this could be a newly created independent public or private body or an already existing public or private body within an existing arrangement.

Third, reporting obligations need to be defined, including obligations for the responsible actors to report on collection and enforcement of fee, on revenue and transfer of revenue, on distribution of revenue and on the use of revenue.

4. HOW IT CONTRIBUTES TO FINANCING

Essentially, a GPPF would contribute to financing by raising financial resources from domestic governments or polluters and then (re)distributing it internationally as direct financial support to eligible countries and funding purposes. In doing so, and like many other financing options for the Global Plastic Treaty, it might also attract and mobilise additional financial resources from other public and private actors, e.g. through blended finance and other innovative public private financing instruments. The actual instruments of financial support can mirror those that also financial mechanisms and funds of other MEAs as well as ODA use, namely grants, technical assistance programs, capacity-building initiatives and specific projects and/or direct budget support to name just a few, also including blended finance in order to attract and stimulate additional financial resources from the private sector.

As discussed above, funds raised through the GPPF can be used to provide direct financial support to any country and for any conceivable funding purpose across the entire plastic life cycle. It could thus in theory cover all costs to end plastic pollution in all countries. In particular, current proposals suggest however that the GPPF can make available private financial resources for the implementation of the Global Plastic Treaty and distribute these resources to countries that lack sufficient financial resources to comply with

their treaty obligations and to cover other higher and unique costs for reducing plastic pollution. Moreover, current proposals suggest certain funding purposes, including

- shortfalls of domestic public budgets for treaty implementation;
- higher and unique costs for reducing plastic pollution;
- costs for investments in safe and environmentally sound infrastructures for waste management;
- systems for reuse and refill;
- research and development for sustainable alternatives to plastics;
- removal of legacy waste;
- just transition; and
- addressing human health impacts of plastic pollution.

Finally, the proposals generally suggest that revenues should be used to rather finance capital expenditures than operating costs (which should rely on other sources, like Extended Producer Responsibility Schemes that are discussed in another deep dive).

As financing and economic instrument that typically targets private actors (directly or indirectly), the GPPF can substantially increase and redirect domestic and international private financial flows to products, processes, behaviours, actions and activities that reduce plastic pollution, thereby supporting and promoting a transition to more sustainable and circular plastic economy. In particular, and if the fee is imposed on producers, it can reduce the production and consumption of primary polymers while increasing the production and consumption of secondary polymers or sustainable alternatives to plastics.

In addition, revenues from a GPPF can reduce the domestic public financial burden in the fight against plastic pollution by shifting the financial responsibility to private actors. They can relieve public budgets and release public financial resources. These freed resources can be used to enable actions and activities to reduce plastic pollution that would otherwise not have been carried out or they are spent for other purposes.

Overall, a GPPF might thus increase and redirect financial flows from public and private sources by attracting more financial resources for less or non-polluting products, processes, behaviours, actions and activities and, at the same time, reducing financial resources for those that contribute to plastic pollution.

As regards concrete numbers, the Minderoo Foundation estimates that a fee between US$ 60 to 90 per tonne or 6 to 9 cents per kilogram of primary plastic polymers production would raise between US$ 350 to 500 billion between 2025 and 2040, which is – according to the same estimates – precisely the amount the necessary funding exceeds the available funding. Even if polluters passed costs onto consumers this would ultimately have a cost-of-living impact of between one and two US dollars per year since the costs of primary plastic polymers form only a small, almost negligible fraction of much less than one percentage of the final price of plastic products or products that contain plastics. At the same time, it would result each year in 90 percent less mismanaged plastic waste leaking into the environment and reduce the production of primary plastic polymers by 10 percent.

5. EXAMPLES

In addition, to the European Commission's Plastics Own Resource (see above), two examples in international cooperation exist that feature some similarities with the GPPF: the International Oil Pollution Compensation Funds (IOPC Funds, https://iopcfunds.org) and the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA, https://www.icao.int/).[6]

The IOPC Funds are a set of intergovernmental organizations established to provide compensation for pollution from oil spills from tankers. They comprise three separate funds: the 1971 Fund, the 1992 Fund, and the Supplementary Fund. These funds are financed by contributions from private entities, such as oil companies and shipping firms. Their contributions are determined annually based on the quantity of oil they receive. More precisely, the total amount needed for the funds is determined by the estimated compensation payments and administrative costs for the upcoming year. Then the share of each private entity is calculated based on their proportion of the total oil received by all contributors.

CORSIA is a global market-based measure developed by the International Civil Aviation Organization (ICAO) to address CO_2 emissions from international aviation and aims to stabilize emissions at 2020 levels. To this end, it requires airlines to offset growth in their CO_2 emissions above this baseline by purchasing carbon offsets from approved projects that reduce or remove emissions in other sectors.

In April 2025, the International Maritime Organization approved draft regulations for a "Net-Zero Framework", with a timeline according to which the framework will be formally adopted in October 2025 and enter into force in March 2027. The framework is a global carbon pricing mechanism and seeks to decarbonize international shipping and achieve net-zero emissions by around 2050. It requires ships over 5,000 gross tonnage to progressively reduce their annual greenhouse gas fuel intensity according to mandatory targets, starting with a 4% reduction by 2028 and escalating to 65% by 2040 compared to 2008 levels. Ships that fail to meet these targets must offset their excess emissions by purchasing credits from other compliant vessels, using banked credits, or contributing to the IMO Net-Zero Fund.

6 It must be noted that both measures have also attracted criticism: on the IOPC Funds see Yang (2017) and on CORSIA see Scheelhase (2020). Since they serve here however only as example, this criticism is not further discussed. Moreover, there are also numerous fees related to plastic pollution in many countries in Asia and elsewhere. They are described in another forthcoming deep dive on Taxes, levies and subsidies.

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ANALYSIS OF PRIVATE SECTOR FINANCING

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ABBREVIATIONS AND SYMBOLS

EPR	Extended Producer Responsibility
GBF	Global Biodiversity Framework
MEA	Multilateral Environmental Agreements
INC	Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution, including in the marine environment
ODA	Official Development Aid
UNFCCC	United Nations Framework Convention on Climate Change

LIST OF FIGURES

1. BACKGROUND

Negotiations of the Intergovernmental Negotiating Committee (INC) to develop an international legally binding instrument on plastic pollution, including in the marine environment[7], are entering the final round (INC-5.2). From August 5 to 14, states gather in Geneva, Switzerland, to conclude the negotiations on what is also labelled the Global Plastic Treaty. Like in most multilateral environmental agreements (MEA), the financing package has been and will be a crucial issue in these negotiations, including questions on the sources, scope and uses of financing.

Reliable and sufficient financing is critical for an effective implementation of any MEA. The future Global Plastic Treaty is no exception. On the one hand, current estimates suggest that achieving the treaty's objectives and fostering the transition towards a less polluting and harmful use of plastics will require substantial financial resources.[8] On the other hand, these estimates also suggest what has already been widely acknowledged: resources for treaty implementation are unequally distributed among countries and many, in particular developing countries are in urgent need for substantial financial resources since they lack the necessary institutional, administrative, and technical capacities to implement future treaty obligations (see also UNEP 2024). Therefore, the combat of plastic pollution, like any other response to a common global environmental challenge, requires mutual financial support and assistance that takes into account all available financing sources and measures to align and redirect financial flows, public and private, domestic and international.

Despite this broad agreement on the need of financial resources, eventually agreeing on a fair and effective financing package can however be challenging. Related negotiations usually involve intense political, often even highly politicized debates as well as very complex technical discussions over the specific design and provisions of the package and individual financing options. This is also underscored by the decision at INC-4 in Ottawa, Canada, to establish and mandate an "ad hoc intersessional open-ended expert group to develop an analysis of potential sources, and means that could be mobilized, for implementation of the objectives of the instrument, including options for the establishment of a financial mechanism, alignment of financial flows, and catalysing finance, for the consideration by the Committee at INC-5"[9].

Leaving aside here the political debates, this deep dive into financing from the private sector, which is part of a series of deep dives into financing options[10], serves to facilitate a common understanding and interpretation of private financing. By providing an objective, independent and solution-oriented input to the INC discussions on private financing, the deep dive seeks to promote a solution-oriented negotiation process and to enable negotiators to discuss and agree on a best possible outcome for the mobilisation, provision, access and effective use of financial resources for the implementation of the Global Plastic Treaty.

The deep dive is divided into four parts: the first part elaborates on what financing from the private sector actually is and how it works. The second part discusses why it is needed. The third part elaborates how private financing contributes to financing and how it affects financial flows. The fourth part identifies basic options for the incorporation of private financing into the Global Plastic Treaty.

7 UNEP/EA.5/Res.14: End plastic pollution: towards an international legally binding instrument, paragraph 3.

8 The most comprehensive, recent and sound estimates on costs to combat plastic pollution with ambitious global and domestic policies and possible savings when compared to business-as-usual scenarios are provided in OECD (2024), Nordic Council of Ministers (2023), UNEP (2023), OECD (2022) and PEW (2020).

9 UNEP/PP/INC.4/5: Report of the intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of its fourth session, paragraph 91(a).

10 Altogether the series covers five deep dives: 1) Financial mechanism and Official Development Aid (ODA), 2) Private financing, 3) Global Plastic Pollution Fee, 4) Extended Producer Responsibility (EPR) schemes, and 5) Taxes, levies and subsidies.

2. WHAT IT IS AND HOW IT WORKS

Private financial flows include expenditures and financial resources of non-public actors. They typically come from domestic and international businesses and financial institutions. They also come from civil society organisations, philanthropic foundations or individuals, in particular for advocacy efforts and the development of sustainable alternatives.[11] Businesses that – besides businesses in the production, manufacturing, retail, consumption or end-of-life stage of the plastics life cycle – provide financial resources to the plastics manufacturing and plastics using sectors are usually commercial banks, investment banks, asset management firms, insurance companies, private equity firms and venture capital firms. Private financing includes a great variety of possible domestic and international financial flows, which can be profit-driven or impact-driven and target all stages in the plastics lifecycle. The most important flows are:

- grants provided to companies (e.g., for research on and development of new innovative products and technologies),
- investments into companies, such as equity or venture capital investments into start-ups and emerging businesses,
- debt instruments that provide companies capital, such as credits, guarantees, loans, performance- and outcome-based financing, etc.,
- capital raising instruments, such as bonds, funds, etc., and
- financial products that help to manage financial risks, such as insurance, futures, options, etc.

Through all these financial flows, private actors can provide direct and indirect financial support to solutions to plastic pollution, i.e. products, processes, behaviours, actions and/or activities that *reduce* plastic pollution. In reverse, private actors also directly or indirectly contribute to financing the goal achievement of the Global Plastic Treaty by withdrawing financial resources from products, processes, behaviours, actions and/or activities that *contribute* to plastic pollution. This is likely if prospects for economic returns are low and/or decreasing and investment risks are high and/or increasing.

Private finance comes with some challenges. Access to private financing and investment conditions vary greatly across regions so that internationally, private foreign direct investment might not go to the regions or countries most in need because they feature unfavourable conditions for private investments. In addition, there is a risk of greenwashing or conflicts between profit-making interests and the treaty goals.

3. WHY IT IS NEEDED

In many multilateral environmental agreements (MEAs), financing from the private sector complements public sources of financing, e.g. through contribution to the financial mechanism of MEA or Official Development Aid (ODA). In fact, it is often a much-needed source to support actions and activities that help to implement MEAs effectively and achieve their objectives. Yet, private finance provides only one stream of financing that is complementary to public financing; oftentimes, a combination thereof would be required, e.g. depending on the market maturity or risk levels of activities that are funded (UNEP FI 2023). Also, in the case of the Global Plastic Treaty, most experts agree that public financing urgently needs to be complemented through private financial resources since the former are likely to be severely limited and insufficient (Busch 2024). In general, private financing is more likely to fund solutions that have high

11 By contrast, public financial resources include expenditures and financial resources of public institutions and authorities. At the domestic level, also including the subnational level, these are, for example, expenditures and financial resources from governments, ministries, regulatory agencies, etc. At the international level, these are, for example, expenditures and financial resources from organisations, programmes and specialised agencies of the United Nations (UN), as well as development finance institutions, such as the World Bank, African Development Bank (AfDB), United States Agency for International Development (USAID), etc.

prospects for economic returns and/or comparatively low investment risks. The less likely or calculable economic returns and/or the higher the investment risks are, the less likely are private financiers willing to engage (UNEP FI 2023).

The above-mentioned assessments of the likely costs for achieving the treaty's objectives and fostering a reduction of pollution and harm from plastics (footnote 2) estimate that as much as between US$ 8.7 trillion and 15.4 trillion is needed from the private sector to effectively combat plastic pollution with ambitious policies between 2025 and 2040 (Nordic Council of Ministers 2023, UNEP 2023, PEW 2020). While these are certainly huge sums, continuing with the business-as-usual scenario would incur much higher costs. According to the same estimates, they would range between US$ 10 trillion and 18.2 trillion, resulting from plastic waste collection and management, whereas environmental harm and dangers to human health are not included – in a scenario where the impacts of plastic pollution are not yet fully understood. If ambitious policies to reduce plastic pollution were implemented, the main savings would come from the reduction of plastic waste that needs to be collected and managed (Nordic Council of Ministers 2023, UNEP 2023, PEW 2020). The investment would reduce the overall capital and operational expenditures for waste management later on. These savings would however mainly occur in high-income regions with already well-developed waste management infrastructure while in other regions considerable investments in establishing, expanding or improving such infrastructure would be needed (Nordic Council of Ministers 2023, OECD 2024).

4. HOW IT CONTRIBUTES TO FINANCING

In principle, private financial actors can provide financial support to products, processes, behaviours, actions and/or activities that reduce plastic pollution across the entire life cycle of plastics, be it in the production, manufacturing, retail, consumption or end-of-life stage. For example, private financing can provide grants into research and development of plastics and plastic products with higher content of recycled plastic and related technologies (production stage/ products and processes). Financiers can make equity or venture capital investments in companies that develop new business models for the reuse of plastic products or innovative products that provide a more sustainable and circular alternative to plastic products (manufacturing and consumption stage/ processes and products). They can grant pay-for-performance loans to recycling companies that seek to achieve more ambitious recycling rates (end-of-life state/ processes). And they can issue futures, options or insurance-like instruments to manage and reduce absolute and relative price risks of recycled plastics (production and end-of-life stage/ products and processes).

According to the Plastics Circularity[12] Investment Tracker of the Circulate Initiative, existing global private finance for curbing plastic pollution stood at US$ 189.7 billion in 5,544 deals in the period between January 1, 2018 and December 31, 2023. Of this, US$ 18.6 billion in 872 deals or 9.8 percent went to Asia (see figure 1).

12 Disclaimer: Despite criticism, the term is used here as it is used by the source. The concept of "plastics circularity" suggests a closed-loop system where plastic materials are reused, recycled, and repurposed, minimizing waste and environmental impact. However, it is important to acknowledge the limitations and challenges associated with this concept. Plastics, by their nature, are persistent pollutants that remain in the ecosystem long after their initial use, posing environmental and health risks. Current recycling processes often result in downcycling, where the quality and value of the material degrade over time, leading to a loss of functional integrity. As such, while efforts to achieve plastics circularity are ongoing, significant hurdles remain in achieving this. More specifically, the Tracker's methodology raises some concerns, too. First, it considers the redesign of existing products as circular if they are more reusable or recyclable than typical products. This may include products that are still disposed or incinerated (when they are not reused, recycled or otherwise fed back into an economic cycle). Second, the Tracker includes investments into chemical or advanced recycling as circular investments although the circularity of this method is heavily contested because of its environmental impacts and often low yield of recycled material (Bell 2023, Quicker 2023, Paddison 2024). Third, it includes all kinds of recovery activities without considering the further processing of recovered plastic waste so that it remains open whether it is fed back into an economic cycle, e.g. through recycling, or whether it is disposed or incinerated.

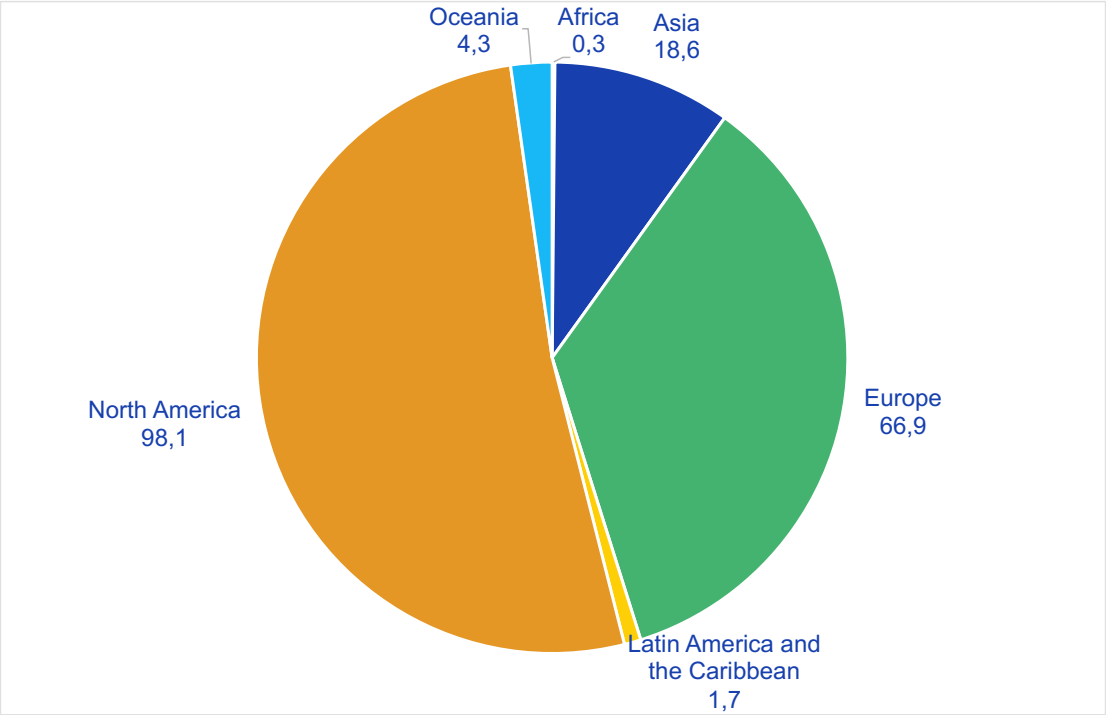

Figure 1. "Plastics circularity" investments by region (2018 to 2023, in billion US$)

Source: Plastics Circularity Investment Tracker (https://circularitytracker.thecirculateinitiative.org/archetypes), last update July 30, 2024

The largest share of private financing currently goes into recovery and recycling of plastic waste. Roughly 82 percent of all private financing or US$ 154.9 billion targeted this stage in the plastic life cycle. Also in Asia, the largest share of private financing went to recovery and recycling of plastic waste (US$ 10.5 billion or 57 percent) (see figure 2), i.e. in the downstream stage of the plastic lifecycle. Yet, many studies suggest that downstream measures like recovery and recycling will not suffice to effectively reduce plastic pollution. In addition, upstream measures are needed, e.g. a reduction in the production of new plastics, bans on certain plastic products and/or redesign of products (Simon et al. 2021; UNEP 2023; Bauer et al. 2024). This stage of the plastic lifecycle does however receive only very little private financial resources (see figure 2).

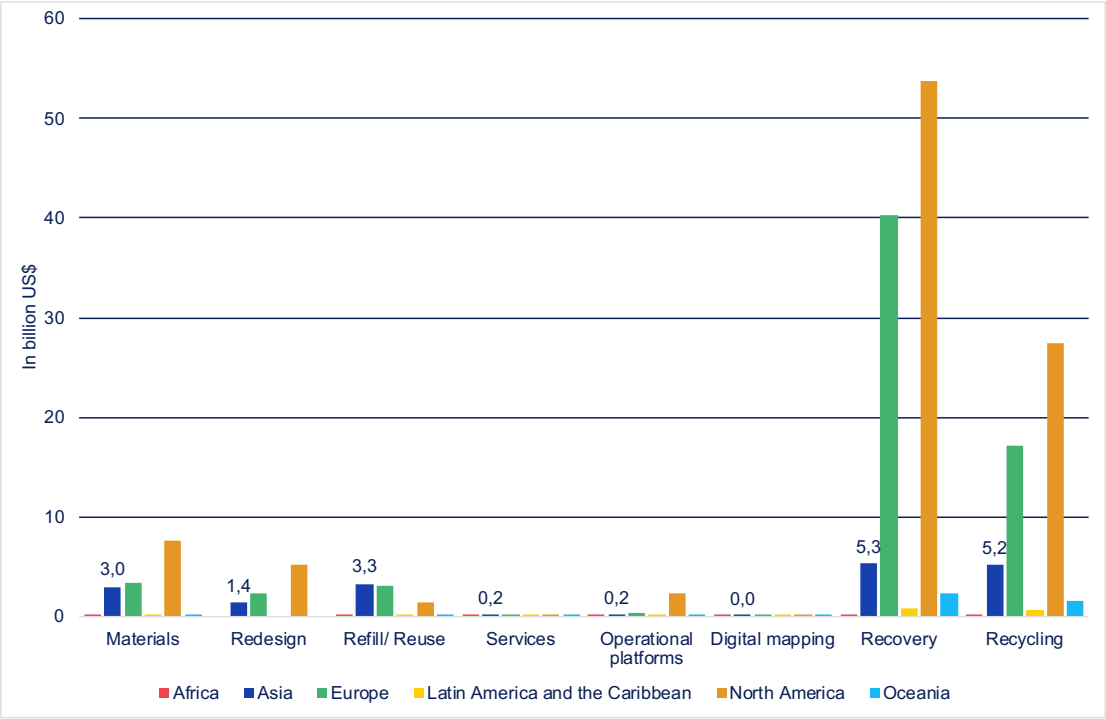

Figure 2. "Plastics circularity" investments by target and region (2018 to 2023)

Source: Plastics Circularity Investment Tracker (https://circularitytracker.thecirculateinitiative.org/archetypes), last update July 30, 2024

Across the globe, the largest contributors of private financial resources are banks (US$ 70.1 billion), corporate investments (US$ 58.6 billion) and private equity (US$ 44.4 billion) (see figure 2). In Asia, the largest contributors of private financial resources are corporate investments (US$ 7.5 billion), banks (US$ 4.3 billion) and venture capital (US$ 2.5 billion).

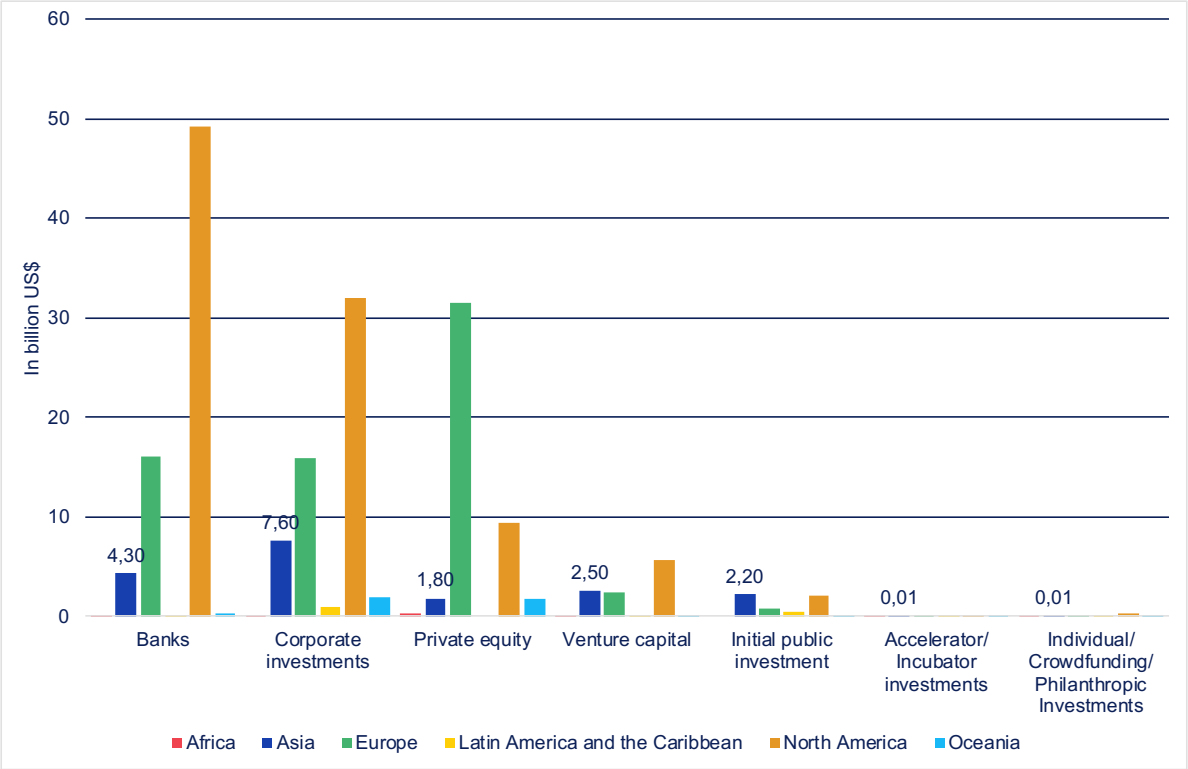

Figure 3. "Plastics circularity" investments by investor and region (2018 to 2023)

Source: Plastics Circularity Investment Tracker (https://circularitytracker.thecirculateinitiative.org/investment-categories), last update July 30, 2024

5. HOW IT CAN BE INCORPORATED IN THE TREATY

Existing MEA use different provisions to stimulate private financing. They can also serve as inspiration or template for similar provisions in the Global Plastic Treaty.

As such, environmental provisions and objectives in MEA already exert substantial influence on investment decisions of private actors through two basic mechanisms. On the one hand, they encourage and trigger market dynamics and decisions in favour of products, processes, behaviours, actions and/or activities that are in line with the MEA's objectives. On the other hand, they discourage or even prohibit investment into products or practices that are not aligned with treaty objectives. In the case of the Global Plastic Treaty, this includes possible bans and phase-outs of certain polymers, chemicals in plastics or plastic products as they are currently discussed in the ongoing Treaty negotiations. Likewise, the proposed (and highly contested) global target to reduce the plastic production would also discourage investments into new plants for plastic production. If adopted, such provisions would pose risks for continued investment into the production of primary polymers or certain plastic products. For example, if governments respond to the treaty by implementing stricter environmental regulations, by phasing-out certain plastics and plastic products, or by banning certain technologies with potentially harmful impacts, like chemical recycling, operational costs, compliance burdens and risks of stranded assets increase in particular for companies that heavily invested in plastics manufacturing. Both aspects need to be considered by private financing actors in the plastics space.

Moreover, there are several more specific options to stimulate private financing through additional provisions in MEA and also in the Global Plastic Treaty.

First, the Global Plastic Treaty could include a generic clause in its provisions on financing that mandates or recommends the **alignment of private financial flows** with its objectives and core obligations. For example, Article 2 c) in the Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC) stipulates to make "finance flows consistent with a pathway toward low greenhouse gas emissions and climate-resilient development" in order to strengthen the global response to climate change.

Second, the Global Plastic Treaty could define **specific, measurable and timebound objectives** for mobilizing financial resources. This would highlight the critical role of private contributions for an effective implementation of the Global Plastic Treaty and its goal achievement. For example, in the Global Biodiversity Framework (GBF) target 19 demands an increase of international financial resources "to at least US$ 20 billion per year by 2025, and to at least US$ 30 billion per year by 2030". It also demands to leverage private finance and to encourage private actors to use impact funds and other instruments to invest in biodiversity. Such objectives and requests establish a clear frame of reference for private actors, enabling them to better assess and evaluate their financial commitments and the associated risks and impacts.

Third, the Global Plastic Treaty could invite **voluntary private contributions** to the financial mechanism of Global Plastic Treaty. In many MEA the financial mechanism through which parties fund parts of the costs for implementation of and for compliance with agreed obligations is open to contributions from the private sector, for example the Specific International Programme to support Capacity-Building and Technical Assistance of the Minamata Convention. Such contributions are typically voluntary and often earmarked to specific purposes. A similar clause could also be incorporated into the Global Plastic Treaty.

Fourth, the Global Plastic Treaty could encourage **blended finance in ODA**. Through ODA, countries receive direct financial support from other countries. It typically comes through non-repayable grants or repayable financial support with preferential conditions, such as loans and credits with no or low interest rates, financial guarantees for loans or credits, or funds and bonds dedicated to specific purposes such as the reduction of plastic pollution. In case of blended finance, ODA in the context of MEA is deliberately designed to attract additional private financial resources and allocated in a way that lowers the risks for private investments, reduces costs and/or improves returns and revenues of private actors when they engage in solutions to a global environmental challenge. In other words, blended finance leverages public funds to mitigate risks and attracts private financial resources that would otherwise not be spent. For example, with only US$ 5.5 billion of public financial resources the Private Sector Facility of the Green Climate Fund leveraged US$ 21.6 billion of private co-financing in 61 projects.[13]

Fifth, the Global Plastic Treaty could specify **single policies to stimulate private financing** in individual core obligations. The current draft of the Global Plastic Treaty already contains proposals for provisions that – if adopted – would mandate or recommend the adoption and implementation of specific policies that directly trigger private financing. On the one hand, it proposes a Global Plastic Pollution Fee that countries would collect from plastic producers on the basis of their output and market share and of which the revenues would then be used to finance the reduction of plastic pollution (and that is described in more detail in another deep dive). On the other hand, the current draft of the Global Plastic Treaty proposes to oblige or recommend countries to develop and implement Extended Producer Responsibility (EPR) schemes (that is also described in more detail in another deep dive). Such schemes give producers the full responsibility for the entire life cycle of their products, including above all the environmentally sound management of the resulting waste and the responsibility for environmental, health and safety aspects during their products' lifetime. Responsibility under an EPR scheme typically means that the targeted actors bear the costs for all related activities and actions and thus obliges private actors to provide adequate and sufficient financial resources to fulfil their responsibility.

Sixth, the Global Plastic Treaty could include a more **generic core obligation to promote policies that stimulate private financing**. Such a provision could generally oblige or recommend countries to identify, select, adopt and then implement measures that help to mobilise financial resources from private financial actors and/or align private financial flows with the objective(s) and provisions of the treaty. There is a whole range of measures to which the obligation might refer and that countries could consider:

13 https://www.greenclimate.fund/sectors/private

- fiscal and economic incentives, e.g. approaches to de-risk financing of solutions that reduce plastic pollution (such as tax breaks, subsidies, credit or performance risk guarantees, pay-for-performance contracts, no- or low-interest loans, long-term and concessional loans, subsidised insurances, etc.);
- fiscal and economic disincentives, e.g. approaches that make financial flows to plastic pollution less attractive (such as taxes, levies, fees, removal of subsidies, etc.);
- development and harmonisation of plastic-related finance taxonomies and metrics, including safeguards for sustainable plastic-related finance;
- mandatory requirements for companies to disclose plastic-related risks and impacts (e.g., in regular reports), including related standards and certification;
- regulations to incorporate plastic pollution into financial supervision frameworks and business risk assessments; or
- labelling and certification of products so that consumers can adapt consumption patterns.

Some provisions in the current draft of the Global Plastic Treaty already refer to such measures that could stimulate or redirect private financial flows. For example, the use of economic and fiscal incentives and disincentives is mentioned in the core obligations on primary plastic polymers, on the use of recycled contents, on alternative plastics and plastic products and on non-plastic substitutes. Disclosure requirements are included in the core obligations on chemicals of concern and on transparency, tracking, monitoring and labelling. Such disclosure allows for heightened scrutiny from shareholders and watchdogs focusing on Environmental, Social, and Governance (ESG) criteria and thus increase risks of investments that fail to comply with such criteria. This growing awareness of environmental and social impacts of investments and their monitoring can lead investors to pay more attention to the financial implications of failing to address them. Recent legal actions against polluting companies, like Exxon Mobile, Shell, or most recently, 3M in the context of per- and polyfluoroalkyl substances (PFAS), exemplify the risks involved. These legal challenges not only threaten financial stability through potential fines and settlements but also damage corporate reputations, impacting shareholder value.

Other MEA also contain such provisions. For example, target 15 of the GBF contains such provisions on risk monitoring, assessment and disclosure, on transparent information for consumers, and on regular reporting. Target 18 of the GBF recommends reforming or phasing out fiscal and economic incentives that are harmful for biodiversity.

Finally, such provisions can easily build on already existing initiatives. The European Union taxonomy for sustainable activities[14], for example, features two plastic-related standards: one for the manufacture of plastic packaging goods that defines some minimum requirements for feedstock use, product design and additives, and another standard for manufacture of plastics in primary form that defines some minimum safeguards in particular related to climate mitigation and adaptation. In the field of global disclosure systems for investors and companies, CDP[15], a not-for-profit organisation, offers standards for voluntary plastics disclosures for companies. Last but not least, the Principles for Responsible Investment[16] – a common initiative of UNEP's finance initiative, the UN Global Compact and private investors – has a Plastics Investor Working Group that brings together 29 global investors representing US$5.9 trillion in assets and that supports responsible investments in plastics through guidelines, reports and other activities.

14 https://ec.europa.eu/sustainable-finance-taxonomy/taxonomy-compass/the-compass

15 https://www.cdp.net/en/plastics

16 https://www.unpri.org/sustainability-issues/environmental-social-and-governance-issues/environmental-issues/circular-economy

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ANALYSIS OF EXTENDED PRODUCER RESPONSIBILITY AS A CONTRIBUTOR TO FINANCING

TABLE OF CONTENTS

ABBREVIATIONS AND SYMBOLS

DRS	Deposit-refund schemes
EPR	Extended producer responsibility
INC	Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution, including in the marine environment
MEA	Multilateral Environmental Agreement
PRO	Producer Responsibility Organizations

1. BACKGROUND

Negotiations of the Intergovernmental Negotiating Committee (INC) to develop an international legally binding instrument on plastic pollution, including in the marine environment[17], are entering the final round (INC-5.2). From August 5 to 14, states gather in Geneva, Switzerland, to conclude the negotiations on what is also labelled the Global Plastic Treaty. Like in most multilateral environmental agreements (MEA), the financing package has been and will be a crucial issue in these negotiations, including questions on the sources, scope and uses of financing.

Reliable and sufficient financing is critical for an effective implementation of any MEA. The future Global Plastic Treaty is no exception. On the one hand, current estimates suggest that achieving the treaty's objectives and fostering the transition towards a more sustainable and circular plastics economy will require substantial financial resources.[18] On the other hand, these estimates also suggest what has already been widely acknowledged: resources for treaty implementation are unequally distributed among countries and many, in particular developing countries are in urgent need for substantial financial resources since they lack the necessary institutional, administrative, and technical capacities to implement future treaty obligations (see also UNEP 2024). Therefore, the combat of plastic pollution, like any other response to a common global environmental challenge, requires mutual financial support and assistance that takes into account all available financing sources and measures to align and redirect financial flows, public and private, domestic and international.

Despite this broad agreement on the need of financial resources, eventually agreeing on a fair and effective financing package can however be challenging. Related negotiations usually involve intense political, often even highly politicized debates as well as very complex technical discussions over the specific design and provisions of the package and individual financing options. This is also underscored by the decision at INC-4 in Ottawa, Canada, to establish and mandate an "ad hoc intersessional open-ended expert group to develop an analysis of potential sources, and means that could be mobilized, for implementation of the objectives of the instrument, including options for the establishment of a financial mechanism, alignment of financial flows, and catalysing finance, for the consideration by the Committee at INC-5"[19].

Leaving aside here the political debates, this deep dive into extended producer responsibility, which is part of a series of deep dives into financing options[20], serves to facilitate a common understanding and interpretation of extended producer responsibility. By providing an objective, independent and solution-oriented input to the INC discussions on extended producer responsibility, the deep dive seeks to promote a solution-oriented negotiation process and to enable negotiators to discuss and agree on a best possible outcome for the mobilisation, provision, access and effective use of financial resources for the implementation of the Global Plastic Treaty.

The deep dive is divided into three parts: the first part elaborates on the essentials and functionality of extended producer responsibility, the second part discusses basic options for design and for the incorporation of extended producer responsibility into the Global Plastic Treaty, the third part sheds light on how extended producer responsibility contributes to financing and how it affects financial flows, and the fourth and last part provides brief examples from the Asian and Pacific region, preferably from countries in which the SWITCH-Asia programme is working, or elsewhere.

17 UNEP/EA.5/Res.14: End plastic pollution: towards an international legally binding instrument, paragraph 3.

18 The most comprehensive, recent and sound estimates on costs to combat plastic pollution with ambitious global and domestic policies and possible savings when compared to business-as-usual scenarios are provided in OECD (2024), Nordic Council of Ministers (2023), UNEP (2023), OECD (2022) and PEW (2020).

19 UNEP/PP/INC.4/5: Report of the intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of its fourth session, paragraph 91(a).

20 Altogether the series covers five deep dives: 1) Financial mechanism and Official Development Aid (ODA), 2) Private financing, 3) Global Plastic Pollution Fee, 4) Extended Producer Responsibility (EPR) schemes, and 5) Taxes, levies and subsidies.

2. HOW IT WORKS

Extended Producer Responsibility (EPR) schemes operationalize the fundamental "polluter pays" principle by assigning comprehensive responsibility to actors throughout the plastics value chain. These schemes target producers, manufacturers, importers, and retailers who introduce plastic products into the market, making them accountable for the entire lifecycle of their products—from production through end-of-life management.

The core premise of EPR is straightforward yet transformative: those who profit from plastic products must bear the costs of managing their environmental impacts. This responsibility encompasses not only environmentally sound waste management—including collection, transportation, storage, sorting, processing, recycling, and disposal—but also environmental, health, and safety considerations during the product's use phase. Ultimately, these responsibilities manifest through financial obligations, requiring targeted actors to fund all related activities and services.

EPR schemes function as domestic financing instruments, mobilizing private sector resources for environmentally sound waste management and circular economy transitions. By internalizing environmental costs, they create market incentives for sustainable product design and business practices while generating revenue streams for waste management infrastructure.

3. HOW IT CAN BE DESIGNED

The effectiveness of EPR schemes depends heavily on thoughtful design choices that align with local contexts, existing infrastructure, and policy objectives. When properly implemented, they transform waste management from a public burden into a market-driven system that incentivizes pollution prevention and resource efficiency throughout the plastics value chain. EPR schemes are inherently complex systems requiring careful design across five fundamental elements, each offering multiple implementation pathways.

Institutional Framework: The ***basic institutional setup*** forms the foundation of any EPR scheme. Legal nature determines whether the scheme operates under mandatory regulatory frameworks with legally binding obligations or through voluntary corporate initiatives. While mandatory schemes provide greater certainty and coverage, voluntary approaches may offer more flexibility in early implementation phases.

Scope and coverage decisions define which actors bear responsibility—producers, manufacturers, importers, or retailers—largely depending on domestic market structures. Coverage can encompass all plastic products, focus on specific categories like packaging, or adopt a phased approach with gradually expanding product coverage.

The choice between ***collective and individual responsibility*** significantly impacts implementation. Collective responsibility operates through Producer Responsibility Organizations (PROs) that assume obligations on behalf of multiple companies, offering economies of scale and simplified administration. Individual responsibility requires each company to manage its own obligations, potentially providing stronger incentives for sustainable design but increasing administrative complexity.

Leadership and governance structures determine whether public authorities or private actors drive implementation, and whether single non-profit or multiple competing for-profit PROs manage operations.

Objectives and Performance Standards: Effective EPR schemes establish clear objectives, targets, and minimum requirements across multiple dimensions. These typically include market share targets for sustainable products, waste collection coverage goals, and recycling rate benchmarks. Additionally, schemes often incorporate product design standards addressing recycled content, recyclability, and chemical additives, alongside technology standards for waste management operations.

Financial Mechanisms: Financial flows represent the operational heart of EPR schemes. Targeted actors pay fees typically calculated based on the weight or volume of products placed on the market. Fee modulation serves as a powerful tool for incentivizing sustainable practices—lower fees reward products meeting environmental criteria such as reusability, recyclability, or recycled content, while higher fees penalize problematic products like single-use items or those containing harmful additives.

These contributions must cover the scheme's full operational costs, including waste management systems, administration, monitoring, and enforcement. Depending on design choices, EPR schemes may also fund public awareness campaigns, education initiatives, and research and development activities.

Waste Management Organization: EPR schemes can organize waste management through three primary models: establishing proprietary systems, contracting private waste management companies, or partnering with local authorities. The optimal choice depends on existing infrastructure and local context. In developing countries, careful consideration must be given to integrating informal waste sector workers, who often play crucial roles in existing waste management systems.

Monitoring and Enforcement: Robust supervision, monitoring, and enforcement mechanisms ensure scheme effectiveness. These typically centre on registries where targeted actors report product quantities and types, while waste management operators provide collection and treatment data. This information enables compliance monitoring and performance assessment. Oversight can be managed by PROs, public authorities, or independent bodies, each offering different advantages in terms of expertise, objectivity, and accountability.

Complementary Instruments: EPR schemes often work synergistically with complementary policy instruments. Deposit-refund schemes (DRS) represent the most prominent example, charging deposits on products that are refunded upon return, thereby increasing collection rates and promoting reusable products. Other complementary measures include taxes, levies, regulatory standards, bans, and informational campaigns.

4. HOW IT CAN BE INCORPORATED IN THE TREATY

The evolving Global Plastic Treaty presents two distinct pathways for integrating EPR schemes. Both approaches focus on manufacturers and importers of plastic materials and products, seeking to advance recyclability, improve recycling performance, and ensure responsible management across the complete product lifecycle and global supply networks.

The first pathway establishes mandatory implementation requirements, compelling each Party to develop and operate EPR systems while adhering to prescribed design specifications. Conversely, the second approach adopts a voluntary framework that encourages—rather than mandates—national EPR adoption, allowing sovereign discretion in implementation decisions. This alternative pathway includes detailed design guidelines that, while non-mandatory, serve as informational resources to support harmonized development of national EPR frameworks.

Given the inherent complexity of EPR systems and their numerous design variables, negotiators must navigate multiple decision points. From a financing standpoint, four key areas demand particular attention: responsibility distribution, product scope, financial mechanisms, and performance frameworks.

Responsibility distribution: Treaty negotiators must choose between two fundamental responsibility structures, each with distinct implications for financial resource mobilization within EPR frameworks. Under collective responsibility arrangements, specialized entities—PROs—assume comprehensive organizational and financial obligations, executing all required functions and services on behalf of regulated entities. This model centralizes financial flows through the PRO structure. Individual responsibility frameworks place direct accountability on each regulated entity, requiring independent management of all organizational and financial obligations for their specific plastic products and autonomous execution of required activities and services.

Product and Sector Coverage: Coverage parameters determine which plastic materials and products trigger financial obligations for responsible management throughout their lifecycle. Negotiators must establish whether EPR frameworks encompass all plastic products across all economic sectors, all plastics within designated sectors, or specific product categories within targeted sectors. Current treaty discussions reference sectoral implementation approaches, which gained prominence during the third INC session. Progressive expansion of product categories and sectoral coverage represents an additional implementation pathway.

Performance Frameworks and Standards: Negotiators must establish provisions governing objectives, performance targets, and minimum standards. These elements create the fundamental conditions determining financial resource allocation and distribution patterns. Such provisions typically encompass performance targets for sustainable product market penetration, waste collection systems, and treatment infrastructure. Additionally, they frequently include specifications for sustainable design practices and technological standards. These framework conditions generate financial resource requirements for achieving established objectives and targets while indirectly defining necessary activities and services for both regulated entities and EPR systems.

Financial Architecture: Under individual responsibility models, each regulated entity independently finances required activities and services. Collective responsibility systems operate through PRO financing mechanisms, which levy fees on entities subject to EPR requirements. Similar to global plastic pollution fee structures, negotiators must determine fee calculation methodologies—whether based on weight or volume metrics of plastic products. Additionally, they must decide on incentive structures through fee modulation to promote environmentally preferable plastic products. For instance, reduced fees might apply to products meeting specific criteria for reusability, recyclability, recycled content, actual recycling performance, or additive composition. Conversely, premium fees could target less sustainable products, including single-use items or plastics containing harmful additives. Regardless of the chosen responsibility model, financial flows must adequately cover all EPR system expenditures to ensure effective operation and environmental outcomes.

5. HOW IT CONTRIBUTES TO FINANCING

Extended Producer Responsibility schemes function as powerful financing instruments, channelling private sector resources toward environmentally sound plastic waste management systems and facilitating the transformation of plastics economies toward sustainable models. When incorporating modulated fee structures, EPR frameworks simultaneously serve as economic instruments that reward environmentally beneficial products, processes, and behaviours while penalizing those contributing to plastic pollution.

EPR mechanisms generate dedicated funding streams for critical pollution reduction activities across multiple domains:

- Infrastructure Development: Financial resources support the creation, operation, enhancement, and scaling of comprehensive waste management systems featuring appropriate collection, processing, sorting, reuse, recycling, recovery, and disposal technologies for plastic materials.
- Legacy Pollution Remediation: Schemes provide funding for cleanup initiatives addressing existing plastic pollution in environmental systems.
- Product Innovation: Resources incentivize improvements in plastic product design, promoting enhanced reusability, repairability, recyclability, and overall resource efficiency.
- Public Engagement: Funding supports awareness campaigns and educational programs that drive behavioral change toward more sustainable consumption patterns.

Well-designed EPR frameworks fundamentally reshape financial flows within plastics economies, directing increased private investment toward pollution reduction solutions. These schemes reduce generated waste volumes, minimize disposal requirements, and prevent mismanagement through strategic financial incentives.

EPR systems directly mobilize domestic private capital for activities essential to achieving environmental objectives and regulatory compliance. This approach significantly reduces public sector financial burdens by transferring responsibility for environmental and health impacts from taxpayers to private actors who profit from plastic products.

By relieving pressure on public budgets, EPR schemes liberate government resources for alternative applications, including complementary plastic pollution solutions. This resource reallocation enhances overall financing capacity for comprehensive pollution reduction strategies while ensuring that environmental costs are internalized by market participants rather than externalized to society.

The resulting financial architecture creates sustainable funding mechanisms that scale with market activity, providing predictable resources for long-term environmental management while incentivizing continuous improvement in product design and waste management practices.

6. EXAMPLES

In February 2022, India implemented a mandatory EPR framework for plastic packaging. The Ministry of Environment, Forest and Climate Change notified detailed guidelines through the Plastic Waste Management (Amendment) Rules, 2022, establishing binding obligations for producers, importers, and brand owners. The scheme covers four categories of plastic packaging and operates through a centralised online portal managed by the Central Pollution Control Board. By 2023, over 6,186 producers, importers, and brand owners had registered, covering 2.32 million tonnes of plastic packaging. The framework establishes progressive recycling targets starting at 25% in 2024-25, increasing to 60-80% by 2027-28. India's approach also features fee modulation, with reduced rates for sustainable packaging and higher charges for problematic materials. The scheme integrates informal waste sector participation and includes mandatory targets for recycled content usage and rigid packaging reuse.

Also in 2022, the Philippines enacted the Extended Producer Responsibility Act (Republic Act 11898), specifically targeting plastic packaging waste management. This legislation institutionalised EPR obligations for manufacturers, brand owners, and importers of plastic packaging whilst applying the fundamental 'polluter pays' principle. The Philippine system addresses the country's significant plastic pollution challenge. The Act operates as a key market-based mechanism, mandating large corporations to recover or divert specific percentages of their plastic packaging footprint to at least 80% by 2028. By August 2024, 44% of obliged enterprises had registered their EPR programmes. The framework includes provisions for local government unit oversight, integration of informal waste workers into formal recycling systems, and mandatory linkage of EPR programmes to corporate sustainability reporting. Enforcement responsibility falls under the National Solid Waste Management Commission and National Ecology Center, whilst the Act emphasises public involvement and educational integration into formal and non-formal curricula to foster sustainability culture.

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ANALYSIS OF FINANCIAL MECHANISM AND OFFICIAL DEVELOPMENT ASSISTANCE

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ABBREVIATIONS AND SYMBOLS

ADB	Asian Development Bank
AfDB	African Development Bank
BBNJ	Agreement on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction
CBD	Convention on Biological Diversity
EU	European Union
GBFF	Global Biodiversity Framework Fund
GCF	Green Climate Fund
INC	Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution, including in the marine environment
MEA	Multilateral Environmental Agreement
Montreal Protocol	Montreal Protocol on Substances that Deplete the Ozone Layer
ODA	Official Development Assistance
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
WHO	World Health Organization

1. BACKGROUND

Negotiations of the Intergovernmental Negotiating Committee (INC) to develop an international legally binding instrument on plastic pollution, including in the marine environment[21], are entering the final round (INC-5.2). From August 5 to 14, states gather in Geneva, Switzerland, to conclude the negotiations on what is also labelled the Global Plastic Treaty. Like in most multilateral environmental agreements (MEA), the financing package has been and will be a crucial issue in these negotiations, including questions on the sources, scope and uses of financing.

Reliable and sufficient financing is critical for an effective implementation of any MEA. The future Global Plastic Treaty is no exception. On the one hand, current estimates suggest that achieving the treaty's objectives and fostering the transition towards a more sustainable and circular plastics economy will require substantial financial resources.[22] On the other hand, these estimates also suggest what has already been widely acknowledged: resources for treaty implementation are unequally distributed among countries and many, in particular developing countries are in urgent need for substantial financial resources since they lack the necessary institutional, administrative, and technical capacities to implement future treaty obligations (see also UNEP 2024). Therefore, the combat of plastic pollution, like any other response to a common global environmental challenge, requires mutual financial support and assistance that takes into account all available financing sources and measures to align and redirect financial flows, public and private, domestic and international.

Despite this broad agreement on the need of financial resources, eventually agreeing on a fair and effective financing package can however be challenging. Related negotiations usually involve intense political, often even highly politicized debates as well as very complex technical discussions over the specific design and provisions of the package and individual financing options. This is also underscored by the decision at INC-4 in Ottawa, Canada, to establish and mandate an "ad hoc intersessional open-ended expert group to develop an analysis of potential sources, and means that could be mobilized, for implementation of the objectives of the instrument, including options for the establishment of a financial mechanism, alignment of financial flows, and catalysing finance, for the consideration by the Committee at INC-5"[23].

Leaving aside here the political debates, this deep dive, which is part of a series of deep dives into financing options[24], serves to facilitate a common understanding and interpretation of two financing options that are usually part of the financial architecture of any MEA: a financial mechanism and official development assistance (ODA). By providing an objective, independent and solution-oriented input to the INC discussions on these two financing options, the deep dive seeks to promote a solution-oriented negotiation process and to enable negotiators to discuss and agree on a best possible outcome for the mobilisation, provision, access and effective use of financial resources for the implementation of the Global Plastic Treaty.

The deep dive is divided into three parts: the first part elaborates on the essentials and functionality of a financial mechanism and ODA in the context of MEA, the second part discusses basic options for design and for the incorporation of the financial mechanism and ODA into the Global Plastic Treaty, the third part sheds light on how the two financing options contribute to financing and how they affect financial flows, and the fourth and last part provides brief examples from other MEA.

21 UNEP/EA.5/Res.14: End plastic pollution: towards an international legally binding instrument, paragraph 3.

22 The most comprehensive, recent and sound estimates on costs to combat plastic pollution with ambitious global and domestic policies and possible savings when compared to business-as-usual scenarios are provided in OECD (2024), Nordic Council of Ministers (2023), UNEP (2023), OECD (2022) and PEW (2020).

23 UNEP/PP/INC.4/5: Report of the intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of its fourth session, paragraph 91(a).

24 Altogether the series covers five deep dives: 1) Financial mechanism and Official Development Aid (ODA), 2) Private financing, 3) Global Plastic Pollution Fee, 4) Extended Producer Responsibility (EPR) schemes, and 5) Taxes, levies and subsidies.

2. HOW IT WORKS

2.1. Financial mechanism

The financial mechanism is a crucial component of any MEA, designed to facilitate their effective implementation. At the heart of such mechanism is typically a fund that mobilizes and channels financial contributions from both parties and non-parties of the MEA. The financial mechanism might also consist of several funds. The primary function of the financial mechanism is to address the disparities in capabilities and capacities among parties to implement the MEA. Financial mechanisms of MEA seek to enable parties that lack sufficient resources for implementing the MEA to meet their obligations by partially covering the costs associated with projects, actions, and activities that directly contribute to the implementation of the MEA. This serves to ensure that resources are allocated in a manner that considers the varying levels of development and resource availability among parties and that promotes equitable participation and compliance.

2.2. Official Development Assistance

Like financial mechanisms of MEA, ODA plays a critical role in addressing the disparities in capabilities and capacities among countries to implement MEA and can fund projects, actions, and activities that serve to implement and comply with the obligations under MEA. Unlike financial mechanisms, ODA can however also be used to support broader objectives in the context of MEA that go beyond merely supporting the implementation of and compliance with MEA provisions. For example, it can be used to fund projects, actions, and activities that contribute to achieving the overall objective of the MEA but are not covered by its specific provisions and obligations. In the context of Global Plastic Treaty, the ODA is thus and overall instrumental in supporting projects and activities that aim to reduce plastic pollution throughout the plastics life cycle, contributing to global environmental sustainability efforts.

ODA is delivered through two primary channels: bilateral and multilateral. Bilateral ODA involves direct financial transfers from developed to developing countries, while multilateral ODA flows through international organizations like the World Bank, regional development banks, like the Asian Development Bank (ADB) or the African Development Bank (AfDB), United Nations (UN) programmes and specialized agencies, like the UN Development Programme or the World Health Organization (WHO), and the European Union (EU). Although multilateral ODA is channelled through these organizations, it ultimately relies on contributions from donor countries, typically developed countries.

The financing provided by ODA can take various forms, including grants, technical assistance, capacity-building initiatives, and direct budget support. In the context of MEAs, ODA not only provides direct financial support but also mobilizes additional resources from other actors. It employs diverse financial instruments to mobilize additional resources, often partnering with private actors through blended finance strategies, including non-grant, concessional, debt, and results-based financing instruments that help mitigate investment risks for private stakeholders. In addition, multilateral donors often establish separate funds or bonds for specific purposes, while bilateral and multilateral donors collaborate with private entities to enhance financial mobilization.

The allocation and utilization of ODA resources depend on the financial capabilities and strategic priorities of donors, as well as the needs and preferences of recipient countries.

3. HOW IT CAN BE DESIGNED

3.1. Financial mechanism

The design of the financial mechanism of a MEA requires deliberate decisions on its structure, operation, and resource mobilisation. These decisions can be integrated directly into the MEA as substantive provisions or established later by the MEA's governing body.

Typically, a financial mechanism follows one of two models: a dedicated fund that mobilizes and distributes financial resources from both parties and non-parties to provide direct financial support for MEA-related activities. This is the most common approach. In the other model, the financial mechanism serves to identify and facilitate access to already existing financial resources but does not provide any direct financial support. For instance, the Global Mechanism of the United Nations Convention to Combat Desertification (UNCCD) only aids parties of the convention in accessing external funds.

When considering the operation and governance of a financial mechanism, three institutional variants are prevalent. First, a newly created independent body may manage the mechanism, as exemplified by the executive committee of the Multilateral Fund of the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol). This is one of the approaches proposed in negotiations on the Global Plastics Treaty, where an independent executive committee would operate a dedicated fund. Second, an existing organisation can be tasked with managing the mechanism, such as the Global Environment Facility (GEF), which administers funds for several MEAs, including the Minamata Convention on Mercury. This is another approach proposed in negotiations on the Global Plastics Treaty, where a dedicated fund would be managed within an existing arrangement. Third, a hybrid approach combines new and existing structures, as seen in the United Nations Framework Convention on Climate Change (UNFCCC) and the Agreement on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction (BBNJ). In the context of the Global Plastics Treaty, this might involve establishing a new fund for specific needs, like the removal of plastic waste that is already in the environment, while utilising existing organisations like the GEF for a fund that provides financial support for all other purposes. Additionally, the concept of an early mover fund, akin to the Global Biodiversity Framework Fund (GBFF) under the GEF, could provide quick-start financing for immediate implementation, offering a dynamic tool for rapid quick treaty implementation.

Resource mobilisation can follow three basic approaches. First, it can be based on mandatory contributions that involve negotiated sums and shares for parties, potentially linked to the UN assessment scale, as seen in the GEF and the Multilateral Fund of the Montreal Protocol. Second, it can rely on voluntary contributions, from both parties and non-parties, similar to the Green Climate Fund (GCF) under the UNFCCC or the Specific International Programme to support Capacity-Building and Technical Assistance of the Minamata Convention. In this case, parties pledge amounts and often earmark them for specific purposes. Non-parties, for example businesses, civil society organisations, international organisations or philanthropic foundations do the same. Third, fees or levies on issue-related activities provide another funding avenue, like those in the Adaptation Fund of the UNFCCC. In the negotiations of the Global Plastics Treaty a global plastic pollution fee is considered as a potential funding source, although it might function independently of the main financial mechanism. Finally, it is also possible to combine two or all three variants, like in the financial mechanism under the UNFCCC with the GEF, GCF and the Adaptation Fund.

3.2. Official Development Assistance

Integrating ODA into MEAs, such as the Global Plastics Treaty, can be achieved through several options that enhance the effectiveness and synergy of financial contributions. All options provide clear signals for (an increase in) ODA support and ensure that new and additional ODA is effectively directed towards treaty goals.

First, the treaty's financial mechanism can be designed to incorporate a specified portion of new and additional bilateral ODA from donor countries, either as a voluntary or mandatory contribution. This mirrors

the approach of the Multilateral Fund for the Implementation of the Montreal Protocol, which permits states to fulfil up to 20% of their contributions via new and additional bilateral ODA. The treaty could also establish numeric targets for support through ODA contributions.

Second, the treaty could commit or recommend developed countries to pledge an increase in new and additional ODA to assist developing countries in meeting treaty obligations. This could emulate commitments seen Global Biodiversity Framework where target 19 urges developed countries to increase their financial support of developing countries, including ODA, to at least USD 20 billion per year by 2025 and to at least USD 30 billion per year by 2030. Additionally, the treaty might incorporate provisions to phase out ODA for activities that contribute to plastic pollution.

Third, following the treaty's adoption, its governing body could negotiate memorandums of understanding with multilateral donors. These agreements could essentially feature two provisions: one that grants treaty parties privileged access to multilateral ODA for implementing and complying with treaty obligations and another one that encourages multilateral donors to align their portfolios with the treaty's objectives. Such memorandums could resemble those between the Secretariat of the Convention of Biological Diversity (CBD) and the United Nations Development Programme (UNDP).

Fourth, the treaty's financial mechanism can serve as a coordination tool, aiding countries in the identification and access of available ODA from bilateral and multilateral sources. This can include for example assistance in applying for, utilizing, and accounting for these funds, similar to the Global Mechanism of the UNCCD. Such an approach would maximize the utilization of existing ODA flows and efficiently mobilize new resources.

4. HOW IT CONTRIBUTES TO FINANCING

4.1. Financial mechanism

Financial mechanisms allocate financial support to countries and activities that fulfil specific criteria for eligible recipients, projects, actions, and costs. These criteria are designed to ensure equitable distribution of resources, catering to countries classified as developing, least developed, or economies in transition, as recognised by international bodies such as the World Bank. Typically, the criteria mandate that recipient countries ratify the MEA and that funded activities align with the MEA's objectives, usually covering areas like capacity-building, technical assistance, technology transfer and other enabling activities, which facilitate the implementation of and compliance with the MEA, like inventories, policy development or strategic planning. The Global Plastics Treaty may however establish its own eligibility criteria to effectively implement treaty provisions across the plastics lifecycle.

The financial mechanisms of MEA focus on covering incremental costs, which are expenses exceeding those of actions and operations, thus encouraging actions beyond business-as-usual. Financial support typically encompasses non-repayable grants and blended finance. With blended finance, many MEA seek to increase available financial resources and to stimulate private sector investments. To this end, instruments like concessional loans and performance-based contracts are employed. This approach is crucial for the Global Plastics Treaty, which aims to stimulate private financing as a key component of its financial mechanism.

Ultimately, the financial mechanism's capacity to provide support hinges on contributions from both parties and non-parties, alongside the defined eligibility criteria. This ensures that financial resources are effectively channelled to projects and activities that promote sustainable practices across the entire lifecycle of plastics.

4.2. Official Development Assistance

Like the financial mechanism, ODA supports countries and projects that meet certain criteria. Donor countries decide where to distribute ODA based on their priorities and the needs of recipient countries. To this end, they also set criteria, allowing ODA to fund eligible countries and initiatives that address plastic pollution. This support is mainly given through non-repayable grants. ODA also uses blended finance, which mixes public and private funds, such as those from the World Bank or UNDP, to offer low-interest loans and financial guarantees. This method not only raises money through special funds and bonds but also encourages private investment by reducing risks and improving potential returns. In the context of the Global Plastics Treaty, ODA boosts financial resources for activities that reduce pollution, aligning with treaty goals. By using blended finance, ODA attracts more private investments, supporting the implementation of treaty provisions and ensuring compliance, thereby enhancing the overall impact of multilateral environmental agreements.

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ANALYSIS OF TAXES, LEVIES AND SUBSIDIES AS CONTRIBUTIONS TO FINANCING

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ABBREVIATIONS AND SYMBOLS

MEA	Multilateral Environmental Agreement
INC	Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution, including in the marine environment

1. BACKGROUND

Negotiations of the Intergovernmental Negotiating Committee (INC) to develop an international legally binding instrument on plastic pollution, including in the marine environment[25], are entering the final round (INC-5.2). From August 5 to 14, states gather in Geneva, Switzerland, to conclude the negotiations on what is also labelled the Global Plastic Treaty. Like in most multilateral environmental agreements (MEA), the financing package has been and will be a crucial issue in these negotiations, including questions on the sources, scope and uses of financing.

Reliable and sufficient financing is critical for an effective implementation of any MEA. The future Global Plastic Treaty is no exception. On the one hand, current estimates suggest that achieving the treaty's objectives and fostering the transition towards a more sustainable and circular plastics economy will require substantial financial resources.[26] On the other hand, these estimates also suggest what has already been widely acknowledged: resources for treaty implementation are unequally distributed among countries and many, in particular developing countries are in urgent need for substantial financial resources since they lack the necessary institutional, administrative, and technical capacities to implement future treaty obligations (see also UNEP 2024). Therefore, the combat of plastic pollution, like any other response to a common global environmental challenge, requires mutual financial support and assistance that takes into account all available financing sources and measures to align and redirect financial flows, public and private, domestic and international.

Despite this broad agreement on the need of financial resources, eventually agreeing on a fair and effective financing package can however be challenging. Related negotiations usually involve intense political, often even highly politicized debates as well as very complex technical discussions over the specific design and provisions of the package and individual financing options. This is also underscored by the decision at INC-4 in Ottawa, Canada, to establish and mandate an "ad hoc intersessional open-ended expert group to develop an analysis of potential sources, and means that could be mobilized, for implementation of the objectives of the instrument, including options for the establishment of a financial mechanism, alignment of financial flows, and catalysing finance, for the consideration by the Committee at INC-5"[27].

Leaving aside here the political debates, this deep dive into taxes, levies and subsidies, which is part of a series of deep dives into financing options[28], serves to facilitate a common understanding and interpretation of taxes, levies and subsidies. By providing an objective, independent and solution-oriented input to the INC discussions on taxes, levies and subsidies, the deep dive seeks to promote a solution-oriented negotiation process and to enable negotiators to discuss and agree on a best possible outcome for the mobilisation, provision, access and effective use of financial resources for the implementation of the Global Plastic Treaty.

The deep dive is divided into three parts: the first part elaborates on the essentials and functionality of taxes, levies and subsidies, the second part discusses basic options for design and for the incorporation of taxes, levies and subsidies into the Global Plastic Treaty, the third part sheds light on how taxes, levies and subsidies contribute to financing and how they affect financial flows, and the fourth and last part provides brief examples from the Asian and Pacific region, preferably from countries in which the SWITCH-Asia programme is working, or elsewhere.

25 UNEP/EA.5/Res.14: End plastic pollution: towards an international legally binding instrument, paragraph 3.

26 The most comprehensive, recent and sound estimates on costs to combat plastic pollution with ambitious global and domestic policies and possible savings when compared to business-as-usual scenarios are provided in OECD (2024), Nordic Council of Ministers (2023), UNEP (2023), OECD (2022) and PEW (2020).

27 UNEP/PP/INC.4/5: Report of the intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of its fourth session, paragraph 91(a).

28 Altogether the series covers five deep dives: 1) Financial mechanism and Official Development Aid (ODA), 2) Private financing, 3) Global Plastic Pollution Fee, 4) Extended Producer Responsibility (EPR) schemes, and 5) Taxes, levies and subsidies.

2. HOW THEY WORK

Taxes, levies and subsidies serve as domestic policy instruments that can incentivize or disincentivize specific behaviours, products, and processes throughout the plastics lifecycle. They work by altering the relative costs and benefits of different choices, making environmentally beneficial options more attractive while discouraging harmful practices.

As incentives, tax breaks and subsidies reduce the costs of products, processes, and behaviours that help reduce plastic pollution, making them more competitive compared to environmentally harmful alternatives. As incentives, taxes typically manifest as tax breaks for environmentally beneficial practices and can take various forms including tax deductions, tax credits, tax exemptions, and preferential tax rates. Subsidies provide direct or indirect financial support through mechanisms such as direct payments, interest-free loans, grants, public investments, or reduced interest rates.

As disincentives, taxes and levies increase the costs of products, processes, and behaviours that contribute to plastic pollution, making them less attractive and competitive. Tax disincentives typically manifest as new taxes, tax increases, or levies on harmful activities. Similarly, removing existing subsidies for harmful practices withdraws financial support, effectively increasing their relative costs.

The effectiveness of these instruments is maximized when they are used in combination, creating a comprehensive system where incentives and disincentives mutually reinforce each other. This coordinated approach ensures alignment with the objectives and obligations of a global plastic pollution treaty.

Taxes, levies and subsidies can be strategically deployed across the entire plastics lifecycle—from production and manufacturing to retail, consumption, and end-of-life management, allowing for targeted interventions where they will have the greatest impact. Their versatility allows policymakers to target specific products, processes, or behaviours at any stage where intervention would be most effective in reducing plastic pollution. In dual approach, using taxes, levies and subsidies as incentives and disincentives, they can create a powerful economic signal that guides market behaviour toward environmental objectives. This comprehensive approach ensures that economic incentives are aligned with environmental goals throughout the entire value chain, from raw material production to waste management and recycling.

3. HOW THEY CAN BE DESIGNED

The integration of fiscal instruments into the Global Plastic Treaty can be achieved through two fundamental approaches, each offering distinct advantages for addressing plastic pollution at the global scale.

The first pathway involves establishing a broad provision within the treaty's section addressing the harmonization of public and private financial flows with the treaty's core objectives and fundamental obligations. This approach would explicitly reference taxes, levies and subsidies as key instruments for achieving treaty goals. Such provisions could encompass the creation and execution of national financial strategies, similar to those found in the Global Biodiversity Framework (GBF), thereby strengthening policy coordination and ensuring optimal mobilization and deployment of domestic financial resources.

The alternative pathway focuses on developing targeted provisions that link the deployment and coordination of fiscal instruments to specific core obligations, ensuring these tools directly support the achievement of each obligation's intended purpose. While virtually all core obligations within the current treaty framework could potentially benefit from such integration, certain obligations are particularly well-suited for fiscal instrument application. Core obligations targeting specific products—such as requirements concerning primary plastic polymers and problematic or avoidable plastic items—represent prime candidates for fiscal intervention. Similarly, process-oriented obligations, including those addressing waste management systems and trade

regulations, offer excellent opportunities for strategic deployment of economic instruments. The current revised treaty text already acknowledges this potential, with four core obligations explicitly referencing economic and fiscal incentives and disincentives as viable implementation mechanisms. These include obligations addressing primary plastic polymers, recycled content utilization, alternative plastics and plastic products, and non-plastic substitutes.

Both integration approaches offer multiple design variants that can be tailored to specific treaty objectives and national circumstances.

Provisions can be structured as legally binding requirements compelling each nation to deploy and coordinate taxes, levies and subsidies in accordance with treaty objectives. Alternatively, they may function as non-binding guidance that preserves national sovereignty over fiscal instrument adoption and alignment decisions.

Treaty provisions may include detailed specifications regarding intended deployment and coordination strategies, such as identifying particular products and processes subject to taxation or levies, or defining which subsidies are deemed environmentally beneficial. Such detailed specifications can alternatively be relegated to treaty annexes to maintain flexibility while providing necessary guidance.

Following the model of proposed global plastic pollution fee provisions, fiscal instrument clauses can establish or recommend specific purposes for levy revenues. This might involve mandating or suggesting that designated portions of collected revenues be directed toward activities that demonstrably reduce plastic pollution, thereby creating a direct link between revenue generation and environmental improvement outcomes.

4. HOW THEY CONTRIBUTE TO FINANCING

Fiscal instruments contribute to financing plastic pollution reduction through two primary mechanisms: direct resource generation and indirect financial mobilization. These complementary approaches create comprehensive funding pathways that can operate across all stages of the plastics lifecycle.

Taxation generates funding through different mechanisms depending on the instrument type. Tax exemptions, reductions, and breaks do not produce direct revenues and therefore cannot serve immediate funding purposes. However, taxes, tax increases, and levies on harmful products and processes create substantial revenue streams.

Standard taxes and tax increases channel revenues into general government budgets, providing flexibility for allocation across various purposes, including initiatives to reduce plastic pollution. Levies offer more targeted funding mechanisms as they typically include earmarking provisions that dedicate revenues to specific environmental purposes. This earmarking ensures that funds generated from plastic-related levies directly support pollution reduction activities across the entire plastics lifecycle.

Tax instruments also mobilize resources indirectly by reshaping market incentives. Tax exemptions and reductions make environmentally beneficial products and processes more economically attractive, while taxes and increases make harmful alternatives less competitive. This dynamic encourages both public and private actors to redirect existing financial resources toward sustainable alternatives while attracting new investment in beneficial activities.

Taxation can be strategically applied throughout the plastics lifecycle, influencing investment decisions in production, design choices in manufacturing, consumption patterns, and end-of-life treatment options. Tax incentives can promote recycled packaging, sustainable product design, and recycling infrastructure, while tax penalties can discourage primary plastic production, harmful additives, and single-use products.

The OECD's Global Ambition Policy Scenario demonstrates the significant revenue potential, proposing a $750 per ton tax on primary plastic polymer production. Universal implementation would generate approximately $387 billion in 2025, based on projected production of 516 million tons.

New subsidies provide immediate financial support for plastic pollution reduction activities across the entire lifecycle. These can include grants for research and development of recyclable or bio-based plastics, reduced-interest loans for refill infrastructure investments, interest-free financing for reusable packaging systems, direct payments to retailers promoting sustainable alternatives, and public investments in waste management infrastructure.

Subsidies create broader financial impacts beyond their direct support. New subsidies reduce costs and improve competitiveness of beneficial activities, attracting additional private investment by de-risking sustainable alternatives. Conversely, removing existing subsidies from harmful activities increases their costs and reduces their attractiveness, freeing up resources for redirection toward beneficial purposes.

This dual effect means subsidies not only provide direct funding but also leverage additional private sector investment by improving the risk-return profile of sustainable alternatives. The removal of harmful subsidies simultaneously reduces support for polluting activities while creating fiscal space for beneficial investments.

Countries can utilize tax and levy revenues along with repurposed subsidies to provide targeted domestic financial support for pollution reduction activities. Levies offer the most direct support through earmarking mechanisms, while most subsidies can be restructured to redirect public resources toward beneficial activities and away from harmful ones. Tax revenues provide indirect support by increasing government fiscal capacity, creating greater flexibility to fund environmental solutions. While these revenues flow into general budgets without specific earmarking, they enhance overall government capacity to finance plastic pollution reduction initiatives.

Direct financial support through subsidies and levy revenues mobilizes and directs domestic public financial flows toward solutions while simultaneously attracting additional private investment. By reducing investment risks, lowering costs, and improving returns for private actors engaging in beneficial activities, these instruments create multiplier effects that extend beyond their direct financial impact.

Conversely, phasing out harmful subsidies decreases both public and private financial flows toward polluting activities by increasing costs, reducing returns, and raising investment risks for actors engaged in harmful practices.

When strategically combined, taxes, levies, and subsidies create mutually reinforcing effects that comprehensively realign financial flows with plastic pollution reduction objectives. This coordinated approach maximizes both direct funding generation and indirect resource mobilization, creating a robust financing framework that supports the comprehensive implementation of a global plastic pollution treaty.

The integration of these instruments across the plastics lifecycle ensures that financial incentives consistently favour sustainable alternatives while penalizing harmful practices, creating market conditions that naturally direct both public and private resources toward pollution reduction solutions.

5. EXAMPLES

Since 2023, the Philippines has implemented an excise tax targeting single-use plastic bags, reflecting a growing regional commitment to addressing plastic pollution through fiscal measures. Under this policy, an excise tax of PHP 20 per kilogram—equivalent to about US$ 0.36 per kilogram or US$ 356.70 per ton—is levied on all single-use plastic bags placed on the domestic market. This tax applies at the point of manufacture or importation, ensuring that producers, importers, and ultimately consumers bear the financial responsibility for the environmental costs associated with disposable plastic bags. The policy aims to achieve several outcomes. Firstly, by increasing the cost of single-use plastic bags, the tax serves as a direct disincentive for both retailers and consumers, encouraging a shift towards reusable alternatives. Secondly, the revenue generated contributes to the national budget, creating a potential funding source for environmental initiatives, including waste management and pollution reduction programmes.

In 2009, Singapore launched the 3R Fund (Reduce, Reuse, Recycle Fund) as a strategic initiative to encourage organisations to minimise waste disposal and promote recycling, with a particular focus on reducing plastic waste. Administered by the National Environment Agency (NEA), the 3R Fund operates as a co-funding scheme, supporting up to 80% of the qualifying costs for waste minimisation and recycling projects, subject to a cap of S$1 million per project. The fund is open to companies, non-profit organisations, and other entities that propose projects aimed at reducing waste sent to Singapore's incineration plants and landfill. A key priority for the fund is addressing plastic waste, given its significant environmental impact and the challenges associated with its recycling. Eligible projects include those that introduce innovative recycling technologies, improve the collection and sorting of plastics, or redesign products and processes to reduce plastic use and enhance recyclability. By providing financial support for such initiatives, the 3R Fund incentivises companies to invest in more sustainable practices, thereby reducing overall plastic waste generation and increasing recycling rates.

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