

Ocean

From Paper to Practice

Translating environmental principles into operational measures in the global plastics treaty

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Introduction

In March 2022, the United Nations Environment Assembly (UNEA) adopted resolution 5/14 to kickstart negotiations towards a new legally binding instrument to end plastic pollution.

As part of the journey to the eventual treaty text, member states and stakeholders were invited to make submissions to the Secretariat ahead of the second round of negotiations (INC-2) with suggestions for potential core obligations and control measures.

Many submissions called for the overarching objectives of the new legally binding instrument to be at least twofold: (i) ending plastic pollution in all environments and (ii) achieving a circular economy for plastics protective of human health and the environment, which has been reflected in the potential objectives presented in the Options for Elements Paper prepared by the Secretariat for the meeting.¹

Critically, the EIA submission highlighted three core principles that guided the conceptualisation of the control measures described therein which should form the leading principles of the eventual agreement – the precautionary principle, the waste hierarchy and the polluter pays principle.

Many member states echoed the need to enshrine guiding principles within the text, with calls to include everything from the principle of transboundary harm to the principle of equity.

While there are several important principles to consider in crafting a strong global treaty, this briefing looks at the potential application of the three principles outlined above. It provides recommendations for how they could be taken beyond simply references in preambular paragraphs and effectively guide both the process of developing a treaty and the enduring implementation and compliance of an instrument truly capable of ending plastic pollution.

Principles for the plastics treaty

Including the principles of international law in the treaty text is more than just paying lip service to high-level concepts. Embedding principles into policy and law helps ensure the implementation of high environmental standards and can guide legislative and judicial authorities on international responsibility in remediating non-compliance with legal obligations.

Throughout the negotiations so far, there have been numerous references to the Rio Principles² which, fundamentally, are a cross-cutting set of principles with elements touching on almost every aspect of the plastics issue. Most notably, Principle 8 says: “States should reduce and eliminate unsustainable patterns of production and consumption.”

Not all principles as we view them in this context stem from the Rio Declaration; however, many have their roots there as the Rio Declaration represents an integral document codifying international environmental principles and outlining the responsibilities of humans to safeguard the environment. It is important to note that while the Rio Declaration formulated certain recognised general principles of international law, these principles continue to evolve as humans better understand our impact on the planet, the interrelatedness of human health and the environment and the global cooperation necessary to protect the integrity of the environment.

In 2015, the Sustainable Development Goals (SDGs) were seen as an evolution and attempt to bring some of the Rio principles into the 2030 Agenda for Sustainable Development and embed them in measurable targets, holding countries accountable to a degree to these concepts and providing a framework for other stakeholders to embed them in their practice.

However, the SDGs are not legally binding and the fact that the majority are not on track to be achieved underscores the need to embed these evolving principles into the core measures and implementation of developing legally binding instruments.

Across the [submissions](#) made to INC-2 (62 government, five groups of governments,³ 176 stakeholders), there are frequent mentions of principles which should guide the implementation of the treaty. Frequently referenced principles include:

- common but differentiated responsibilities – Rio Principle 7 (e.g. [Africa Group](#)), the principle establishing that all states are responsible for addressing global environmental destruction yet distributes the cost among different states according to their historical responsibilities and respective capabilities
- polluter pays – Rio Principle 16 (e.g. [Switzerland](#), [Tunisia](#), [AOSIS](#)), this principle provides for the internalisation of environmental costs and the use of economic instruments to ensure the polluter should bear the costs of pollution
- precautionary principle or approach – Rio Principle 15 (e.g. [Australia](#), [Burkina Faso](#), [Sri Lanka](#)), this principle underlines that where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation
- the principle of intergenerational equity (e.g. [Tonga](#), [Ecuador](#), [Mauritius](#)), the principle provides for the protection of natural resources and the environment for the benefit of future generations
- the need to take a rights-based approach (e.g. [Cook Islands](#), [Micronesia](#), [Uruguay](#)), an approach that prioritises the application of human rights standards and principles in the treaty-making process.
- In several cases, member states referenced all three of the principles highlighted below in this document to guide control measures in the treaty (e.g. [Monaco](#), [Moldova](#), [Guinea](#), [Ecuador](#), [Oman](#), [Switzerland](#)).

Translating principles into operational measures in the plastics treaty

Precautionary principle. At its core, this principle is about ensuring a lack of scientific certainty does not delay or preclude action that could protect human health and the environment from potentially irreversible harm.

While we do not have all the information available about the long-term impacts of harmful chemicals or substances used in plastic production, there is enough scientific evidence to act now. Applying it in the treaty context will ensure that Parties implement protective measures from the outset, while being empowered to take recommendations from a dedicated Scientific Assessment Body in order to update listings as new information becomes available, without the need for additional ratification.

With this in mind, if the treaty truly has an overall objective to protect human health and the environment from the lifecycle impacts of plastic, the precautionary principle must thread through the conceptualisation of control measures and core obligations. Such measures could include:

- 1. transparency.** A general obligation for Parties to adopt legal and administrative measures into national legislation to ensure access by public authorities and the public to the chemical components of plastic materials and products, including through mandatory disclosure requirements and labelling, to fully inform policymaking and the decisions of citizens and companies
- 2. sustainable production and consumption.** Eliminate problematic polymers and chemicals from production and consumption, taking a precautionary approach to risk based on the intrinsic hazard of the polymer and chemical (or group of chemicals) in question, even in the absence of scientific unanimity or certainty, and ensure polymer safety criteria is a key component by empowering the Conference of the Parties (CoP) to adopt safety criteria for polymers in circulation based on, for example, (i) the risk of decomposition into microplastics that could become vectors of chemical and biological contaminants and (ii) the ability of the polymers to be recycled safely. The criteria could also be guided by the concept of chemical simplification, making regulation much easier. Taking a positive list approach to regulating chemicals where only certain chemicals were explicitly allowed for use, would be a favoured approach to avoid risk of regrettable substitutions implicit in regulating one chemical at a time
- 3. safe and sustainable plastic product design and use.** Establish robust safety specifications to be included in an eco-criteria registry, empowering the CoP to review and update periodically, reducing the risk of products with unsafe materials entering the market, based on a 'no data, no market' approach that shifts the burden of proof for product and material safety onto plastics producers
- 4. environmentally sound management of plastic waste.** Define what types of end-of-life treatments should be avoided, specifically to ensure harmful practices such as incineration, cement kilns and advanced recycling are viewed with a precautionary mindset.

In addition to the above, scientific advice to the CoP should be free from conflicts of interest. This can be achieved by establishing clear conflict of interest policies for scientists and academics providing advice to the Governing Body, Secretariat and Scientific Assessment Body.

Waste hierarchy. While the waste hierarchy has yet to be recognised as its own general principle in international environmental law, it is a principle of waste management that embodies the prevention and precautionary principles. The waste hierarchy provides a clear rationale for the priority order of action to be taken to reduce waste and protect environmental and human health.

Countries around the globe implement waste hierarchy in their domestic legislation and the principle has been implemented in international waste trade agreements such as the Basel Convention. In their INC-2 pre-session submissions, committee members repeatedly called for the waste hierarchy to guide policymaking in the treaty (see New Zealand for a strong example).

The concept of the waste hierarchy is not a Rio Principle nor even a principle in the traditional legal sense, but it is mentioned repeatedly in submissions as a framework to guide policymaking in the treaty and provide a rationale for which control measures and core obligations to prioritise to achieve maximum environmental and human health impact.

In this framework, prevention, reduction and reuse would take priority over other measures, particularly because recycling alone will not end plastic pollution. Yet, attention and investment have disproportionately focussed on this downstream component of the plastics lifecycle. Moreover, recycling plastics which contain toxic substances perpetuates the recirculation of harmful toxins and additives, undermining the concept of a safe circular economy.

Simultaneously, a discrepancy exists between projected plastic production growth and projected recycling capacity. Considering plastic toxicity and projected production increases, designing a treaty through the lens of the waste hierarchy will provide more effective upstream prevention to help adequately address the environmental and public health crises



Source: European Commission

The waste hierarchy could be applied in multiple ways:

- by crafting an Article on Safe and Sustainable Plastic Product Design and Use that empowers the CoP to adopt decisions to list eco-criteria that follow the rationale of the waste hierarchy, starting with prevention of waste and reducing the amount of plastic that may become waste. Such eco-criteria could include, inter alia, durability, reusability, circularity, biodegradability, compostability, safety and recyclability. Robust criteria, in tandem with Extended Producer Responsibility (EPR) and transparent reporting on production and use, will effectively support implementation
- ensuring an Article on the Environmental Sound Management of Waste places emphasis on preventing plastic waste by requiring parties to set binding targets for increasing the amount of plastic that is reused within recognised reuse systems,⁴ with an initial focus on high-impact categories such as packaging and beverage containers, while also promoting reuse and refill ‘on the go’ or at home. Targets for overall and sector-specific reuse and overall caps on production of single-use plastics would work harmoniously to enshrine the waste hierarchy in the treaty. The CoP should also be required to adopt complementary guidelines on:
 1. reuse (e.g. definitions, design standards, scaling of reuse infrastructure through incentives, investment, criteria for managed pool systems and collection rate targets)
 2. preparation for reuse⁵ informed by different sectors and product categories beyond packaging, including, for example, electronics, textiles, agriculture and fisheries, to prioritise material and product waste prevention systems focussed on repair, cleaning and reusing products and components without the need for additional reprocessing.
- accounting for the waste hierarchy in the provision of funds for capacity building and technology transfer under the new agreement, for example, as part of an Article on Financial Resources and Mechanisms. Investment and financial support to enable compliance should strictly follow the waste hierarchy, focusing investment on initiatives that target waste prevention, reuse systems and preparation for reuse above downstream interventions such as recycling. The private sector should finance investment in end-of-pipe solutions such as remediation and waste management infrastructure, given these fall lowest in the waste hierarchy.

Polluter pays principle. Perhaps the most widely cited principle in country submissions, the polluter pays, is grounded in the notion that the treaty should establish a mechanism or approach which requires companies which produce plastic pollution to cover the costs of remediating or preventing it in the environment. Attaining producer financial accountability in a global economy is tricky and will have to be achieved through appropriate financial mechanisms and management thereof. States are already exploring the implementation of the polluter pays principle

in a financial mechanism. Ghana proposed a Global Plastic Pollution Fee (GPPF) for producers based on the premise that while relatively few countries produce plastic polymers, all countries face the high costs of paying for the end-of-life treatment of these plastics.

To answer the question of who pays and how, the treaty will need to operationalise certain approaches within the treaty that account for the 'true costs' of putting plastic on the market. While the polluter would typically be expected to pay for remediation and end-of-life collection and treatment, the principle could be applied in multiple ways, including:

- addressing the current distortion in the market that incentivises continued extraction and production of virgin plastic by eliminating the harmful subsidies that permit it, thus ensuring producers are genuinely accountable for the full cost of their operations. States can achieve this with an Article on Sustainable Sourcing of Raw Materials which obligates each Party to adopt legal and administrative measures into national legislation to eliminate subsidies for fossil fuels used as raw materials and petrochemicals destined for virgin polymer production
- within an Article on the Environmentally Sound Management of Plastic Waste, ensuring the CoP is required to adopt criteria for EPR schemes and promote national, regional or global EPR schemes, as appropriate, across relevant sectors. Such a scheme would ensure producers have responsibility for the products placed on the market and for paying the costs of end-of-life collection and treatment. Eco-modulation of fees could then follow the eco-criteria within the Article on Safe and Sustainable Product Design and Use and a portion of EPR fees could be leveraged to fund reuse infrastructure and systems
- through encouraging taxes and fees on plastics producers at the national level as part of National Action Plans, either as part of or in parallel to national, regional or global EPR schemes, that reflect the true cost of materials placed on the market and disincentivise single-use plastics, those made with virgin plastic polymers and those containing harmful or toxic substances
- through establishing a Plastic Pollution Trust Fund to complement a dedicated multilateral fund in an Article on Financial Resources and Mechanisms. The Trust Fund could be controlled by the Parties in order to provide additional financial assistance to support the remediation of existing or legacy plastic pollution as well as other costs, such as dealing with large-scale plastic pollution events, such as pellet spills in the marine environment. Fees, levies and voluntary contributions from producers and other companies should fund the Trust Fund. Within this Article, there is also scope to pursue Ghana's proposed GPPF, which states that collecting a GPPF from polymer producers "would entail considerable efficiencies because the supply chain is relatively concentrated at the upstream stage. Unlike fragmented national fees, a globally coordinated fee under the instrument would ensure a level playing field for all producers, in keeping with the need to avoid market distortions under the polluter pays principle in the Rio Declaration".

Considering how the polluter pays principle and the waste hierarchy need to be viewed holistically, the transition from a linear economy to one that retains finite resources is a good example.

For negotiators to achieve the goals of the treaty, there is a need to transition to affordable and inclusive prevention, repair and reuse systems at scale requiring significant investment in infrastructure and logistics, including the potential retooling of existing plastics processing facilities and a just transition for workers along the value chain.

Negotiations on the best use of financing to support enabling activities, incremental costs and compliance with the obligations of the agreement should include an emphasis on the need for solutions that promote resource efficiency rather than investment in end-of-life treatment technologies that are not aligned with the priorities of the waste hierarchy.

Such discussions should explore how best to channel private sector finance to support this through the application of the polluter pays principle.

Conclusion

This briefing serves to illustrate that consideration of environmental principles is not simply a framing exercise warranting a mention in the preamble of the treaty text, but rather a comprehensive and holistic framework through which to view the development of legally binding measures in the eventual agreement.

Consideration of such principles should provide a guiding hand for negotiators considering measures to effectively end plastic pollution.

References

1. UNEP/PP/INC.2/4 [available here](#)
2. Rio Declaration on Environment and Development, 1992. [Available here](#)
3. Including the European Union (27); Africa Group (53 - excluding Egypt); AOSIS (39); GRULAC (33); HAC (20) representing 169 individual states
4. See EIA and DUH briefing on reuse systems and the plastics treaty, including initial definitions and considerations for negotiators [here](#).
5. See European Commission definition [here](#)