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An International Legally Binding Instrument on Plastic Pollution: A Legal and Policy Analysis

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Abbreviations

CBD	Convention on Biological Diversity
CIEL	Centre of International Environmental Law
COBSEA	Coordinating Body on the Seas of East Asia
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
EIA	Environmental Investigation Agency
EPR	Extended Producer Responsibility
GATT	General Agreement on Tariffs and Trade
GEF	Global Environment Facility
HAC	High Ambition Coalition to End Plastic Pollution
ILBI	International Legally Binding Instrument
IMO	International Maritime Organisation
INC	Intergovernmental Negotiation Committee
ITLOS	International Tribunal for the Law of the Sea
IUCN	International Union for Conservation of Nature
LDCS	Less Developed Countries
LMG	Like-Minded Group
MARPOL	International Convention for the Prevention of Pollution from Ships
MEAs	Multilateral Environment Agreement
NAPs	National Action Plans
NGO	Non-Governmental Organisation
PIC	Prior Informed Consent
RTA	Regional Trade Agreement

UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNEA	UN Environment Assembly
UNEP	UN Environment Programme
UNFCCC	UN Framework Convention on Climate Change
ODS	Ozone-Depleting Substances
POPs	Stockholm Convention on Persistent Organic Pollutants
RZD	Revised Zero Draft
SIDs	Small Island Developing States
SDGs	Sustainable Development Goals
TRIPS	Trade-Related Aspects of Intellectual Property Rights
WCEL	World Commission on Environmental Law
WTO	World Trade Organisation

Executive Summary

The success of the Global Plastic Treaty depends on setting a clear and purposeful objective that aligns with UNEA Resolution 5/14, which calls for a comprehensive approach addressing the full life cycle of plastics. However, negotiations have revealed divisions between states pushing for upstream measures to reduce plastic production and those favouring downstream solutions focused on waste management. Industry influence and competing national interests have further complicated efforts to agree on the treaty's scope and ambition. While draft texts propose varying formulations of the treaty's objective, ranging from ending plastic pollution to broadly protecting health and the environment, key terms such as "plastic pollution" and "life cycle" remain undefined, leaving interpretation gaps. Drawing lessons from successful treaties like the Montréal Protocol, this process highlights the need for a clearly articulated, enforceable objective that targets the root causes of plastic pollution and supports a legally coherent, adaptive framework.

The ILBI is a complex international negotiation involving various interests from different national perspectives, which are not always compatible. Accommodating these interests and prioritising approaches to reduce negative externalities of plastics pollution, requires a clearly defined scope. However, as the ILBI negotiations have progressed the scope has increasingly lost clarity of definition. The initial scope in the Intergovernmental Negotiating Committee (INC-1) stated the need to simultaneously reduce upstream plastics production and improve downstream recycling. As the INCs have progressed, pro-plastic incumbent interests have applied their influence to prevent consensual scope agreement. Attempting to shift the scope away from reduction in upstream plastic production, while focusing on downstream recycling alone. Further examination of the increasingly inconsistent scope reveals potential funding options have been used to reinforce such downstream agendas. This reinforces the need for a clearly defined scope, which accommodates transparent and impartial, centrally administered funding.

Environmental law principles are crucial tools for resolving legal issues and linking various obligations in international law. Certain principles may even be acknowledged as customary international norms or *erga omnes* obligations. The ILBI should address the interconnectedness of these principles and their potential to establish a robust legal framework for addressing plastic pollution by establishing clear definitions and scope of application for each principle, determining their legal status within the ILBI, developing practical implementation strategies

specific to plastic pollution, creating mechanisms for monitoring and enforcement, and addressing potential challenges in applying these principles to the complex plastics lifecycle. By incorporating these environmental law principles, the ILBI can formulate a comprehensive and practical approach to combating plastic pollution on a global scale. This will necessitate collaboration among states, industries, and stakeholders to ensure the successful implementation of these principles throughout the plastics value chain. Key principles include Sovereignty over Natural Resources, Sustainable Development, the Polluter Pays Principle, the Precautionary Approach, Common but Differentiated Responsibility, Transboundary Harm, Intergenerational Equity, Prevention, and the Ecosystem Approach.

Sustainable design and circularity are essential to reducing plastic pollution. It highlights the energy efficiency of plastics compared to alternatives but stresses the need to transition from waste management to upstream measures like eco-friendly design and reduced consumption. The vast range of polymers complicates recycling, but strategies like mono-material design, disassembly design, and biodegradable resins can enhance recyclability. The chapter critiques the Chair's text of the Global Plastics Treaty for lacking enforceable definitions and targets, risking aspirational goals without actionable mechanisms. It advocates for binding reduction targets, Extended Producer Responsibility (EPR), and global regulatory harmonisation to hold producers accountable. The role of industry lobbying, limited participation of Indigenous voices, and inadequate infrastructure are identified as key obstacles. Drawing from successful models like the Montreal Protocol and California's SB-54 law, the chapter urges a legally binding framework under the ILBI to regulate the entire plastic lifecycle. Without bold action, global plastic production and pollution will rise sharply. True circularity requires integrating sustainable design, consumption reduction, and transparent accountability into international law.

It is further important to evaluate how well human rights principles are integrated into the negotiation texts of the proposed ILBI on plastic pollution. The analysis focuses on three key areas: rights holders, human rights and a just transition, as well as the human right to health. While there has been progress over the negotiation rounds in recognizing rights holders like Indigenous peoples, informal workers, women, and children, their participation remains largely symbolic. Despite calls from Indigenous and women's groups for meaningful involvement, the Chair's Text from December 2024 still falls short. It mentions these groups but does not guarantee them decision-making power. In terms of Human Rights and a Just Transition, these

aspects are mentioned in the text in vague terms and without binding obligations. If human rights are not more deeply and explicitly incorporated—particularly the human right to health—the treaty risks entrenching inequality rather than overcoming it. As we argue, human rights protections must be made enforceable, not voluntary, to truly empower affected communities and ensure equitable solutions. There must be stronger, legally binding human rights language, including access to justice and remedies for affected communities. Incorporating human rights explicitly throughout the treaty could ensure greater equity, transparency, and accountability. The Human right to health is not explicitly recognized in early INC texts, though references to health impacts from plastic pollution exist. The Chair’s Text includes options for a health-focused article, but stronger commitments are needed for the treaty to recognize how the full life cycle of plastics harms human health, especially among vulnerable communities (e.g., Arctic Indigenous Peoples). Our recommendations to improve the human rights aspect includes providing enforceable provisions for rights holders’ participation, including binding commitments to a just transition and an explicit integration of the human right to health. Without these, the ILBI risks failing those most impacted by plastic pollution and may fall short of driving meaningful, equitable change.

The International Legally Binding Instrument (ILBI) on plastic pollution must operate within a fragmented global governance landscape, where multiple existing regimes such as UNCLOS, MARPOL, the Basel, Rotterdam, and Stockholm Conventions, along with trade frameworks like the WTO which already regulate related environmental and trade issues. Effective interaction between these regimes is essential to ensure coherence, prevent duplication, and strengthen implementation. While synergies can be found in shared goals like marine protection and hazardous chemical regulation, overlapping mandates and inconsistent obligations risk undermining enforcement and creating confusion, especially for developing countries. The ILBI’s ability to align its lifecycle approach to plastics with existing legal frameworks will be key to its legitimacy and impact. To address these challenges, the chapter recommends the establishment of formal coordination mechanisms, improved trade alignment, stronger compliance and enforcement structures, and harmonized monitoring systems that support an integrated global response to plastic pollution.

Combating plastic pollution needs funding. The evolution of negotiations from INC-1 to INC-4 shows a deepening focus on supporting developing countries (particularly LDCs and SIDS) under Common but Differentiated Responsibilities, while key disputes persist over funding sources and equitable distribution. The Chair’s Text proposes a financial mechanism operated

by the COP to support national action plans, reporting, capacity building, and technology transfer. Compared with the Montreal Protocol Multilateral Fund, the financial mechanism chapter in the Chair's Text shows the potential of enhancing capital access, incentivizing sustainable practices, encouraging global collaboration and clearer targets and monitoring. However, the mechanism could be better designed if it ensures balanced governance prioritizing vulnerable nations and establishes clear allocation guidelines that ensure accessible, adequate, predictable, and sustainable financial support.

Compliance with international treaties necessitates monitoring and reporting within their frameworks. These aspects are discussed in various chapters concerning the ILBI, emphasizing the significance of cost-effective yet competitive compliance mechanisms. In this context, it is crucial to establish an independent monitoring body with financial autonomy to ensure objectivity and resilience. Scientific and technical advisory committees can support the monitoring body to ensure decision-making remains grounded in empirical evidence. Effective compliance mechanisms are contingent upon the presence of a robust and regular reporting system. The potential reporting system under ILBI should encompass the entire lifecycle of plastics, incorporating both economic data, such as production and trade figures, and environmental data, like pollution levels. For the future ILBI, it is essential to integrate cooperative and competitive compliance mechanisms, establish a self-enforcing framework with explicit national and international obligations, prioritize monitoring, data transparency, and inclusive reporting systems, as well as ensure support for developing countries through financial, technical, and institutional assistance.

Chapter 1

Introduction

While plastics have driven innovation, particularly in healthcare and food preservation, plastic pollution has become an increasing concern. It is now globally recognised that this material persists in the environment without meaningful degradation, carries toxic chemicals, and is produced so cheaply that businesses often prioritise virgin plastic production over recycling or sustainable alternatives. As a result, there is growing international momentum to mitigate its impacts and ‘rethink how we produce and use plastics.’¹

In response to the crisis, the United Nations Environment Assembly (UNEA) of the United Nations Environment Programme (UNEP) called for an end of plastic pollution and mandated the development of an international legally binding instrument (ILBI) on plastic pollution. This treaty is intended to take a comprehensive approach covering the full life cycle of plastics considering, among other things, the principles of the Rio Declaration,² as well as national circumstances and capabilities (Resolution 5/14).³

The Intergovernmental Negotiation Committee (INC) established under Resolution 5/14 and tasked with facilitating negotiations on a draft ILBI has now worked through the five sessions originally planned but has not yet managed to agree a final text. It has, however, produced detailed reports on the work of each session and several preliminary drafts on which to base its discussions. On the basis of the INC’s work thus far, this report seeks to outline and critically analyse key aspects of any instrument that might eventually be adopted, primarily with a view to informing further discussion and debate on the form that such an instrument should ideally take. Specifically, it aims to equip civil society actors with an overview of the evolution thus far of the emerging instrument and of arguments that might be advanced for improving its

¹ Inger Andersen, Opening of Partnerships Day hosted by Canada ahead of the fourth round of negotiations on the plastic pollution instrument, INC-4 <https://www.unep.org/news-and-stories/speech/global-village-global-plastics-instrument> (date: accessed 15 February 2025).

² Rio Declaration on Environment and Development, in the Report of the UN Conference on Environment and Development, UN Doc. A/CONF.151/26, (1992).

³ UN Environmental Assembly of the UN Environment Programme (UNEP), Resolution 5/14 7 March 2022 UNEP/EA.5/Res.14 [hereinafter Resolution 5/14].

effectiveness having regard to the environmental and health-related objectives outlined in Resolution 5/14.

This report is set out in three sections. The first, addressing “Structural” issues, contains three individual chapters examining the options under the ILBI in terms of *Objectives and Definitions*, *Scope of Application* and guiding *Principles*. The second section addresses a selection of “Substantive” matters arising under the instrument and includes individual chapters on *Sustainable Design, Circularity and Consumption*, the requirements of a *Human Rights-Based Approach* under the instrument, and the imperative of practical arrangements for *Regime Interaction*. Finally, a section on “Implementation” issues arising in respect of the ILBI includes chapters on its proposed *Financial Mechanism* and arrangements for *Monitoring, Compliance and Reporting*.

The authors of this report – all postgraduate law students taking the *Environmental Law Clinic* module as part of their studies on the LL.M. (*Environmental and Natural Resources Law*) Programme at University College Cork – are keen to compile and make available relevant information and insights that might prove useful in identifying feasible options for inclusion in the final ILBI. Ultimately, they wish to support all efforts to agree and conclude an instrument that might lead to the best possible outcomes in respect of the pervasive problem of plastic pollution.

Chapter 2

Objectives and Definitions

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A. Rethinking Plastics, The Ideal Objective of a Global Plastics Treaty

Resolution 5/14 clearly signals the UNEA's commitment to preventing, reducing, and ultimately eliminating plastic pollution. However, aligning the proposed ILBI objectives and priorities has been contentious - a challenge that has persisted throughout the INC sessions and which continues to shape the treaty's content. To provide clarity and direction for both state and non-state actors, the ILBI must act as a guiding compass, ensuring that states respond effectively to the urgency of the plastic pollution crisis.

The ILBI needs a well-defined *raison d'être*, as its provisions will be interpreted 'in light of' its object and purpose.¹ This process involves balancing an interpretation of individual provisions with an assessment of the treaty's overall logic, a task that risks circular reasoning if the treaty's purpose and aim is not clearly established from the outset.²

The ILBI's objective(s) must encapsulate the treaty's essence, serving as the foundation for its implementation and long-term evolution. Beyond defining its core goals, the object and purpose of the ILBI will shape the treaty's future legal and political development, as any amendments or multilateral agreements entered into must remain compatible with the treaty's original object and purpose.³ This is particularly critical given the climate impacts generated

¹ Convention on the Law of Treaties, Article 31 (adopted 23 May 1969, entered into force 27 January 1980), 1155 U.N.T.S.331 [hereinafter VCLT].

² D. S. Jonas & T. N. Saunders, "The Object and Purpose of a Treaty: Three Interpretive Methods" (2010) Vanderbilt Law Review, Vol 43, No 565. See also, dissenting opinion of Judge Anzilotti's in Interpretation of the Convention of 1919 Concerning Employment of Women During the Night, PCIJ, Series A/B, No. 50 (1932), 383–389, 383 as referenced by I. Buffard & K. Zemanek, "The "Object and Purpose" of a Treaty: An Enigma?" (1998) Austrian Review of International & European Law, Volume 3, pp 311–343, p 311.

"I do not see how it is possible to say that an article of a convention is clear until the subject and aim of the convention have been ascertained, for the article only assumes its true import in this convention and in relations thereto. Only when it is known what the Contracting Parties intended to do and the aim they had in view, is it possible to say either that the natural meaning of terms used in a particular article corresponds with the real intention of the Parties, or that the natural meaning of the terms used falls short of or goes further than such intention."

³ Articles 19(c) and 41 of the VCLT prohibits changes "incompatible" with a treaty's object and purpose.

throughout the full life cycle of plastics⁴ and the potential intersections between the ILBI, the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. For the ILBI to function as a living instrument, incorporating the principle of good faith could enable evolutionary interpretation, ensuring the treaty remains adaptable to emerging challenges. As recognised, ‘good faith reaches further than the treaty text, as it relates to the substance of a treaty,’⁵ reinforcing the need for a well-defined and forward-looking objective(s).

Furthermore, the ILBI’s objective(s) will be crucial for ensuring rule coherence and guiding states’ interim obligations to uphold the treaty’s intent before it enters into force.⁶ While the **current** draft text of the ILBI provides that ‘no reservations’⁷ may be made,⁸ a clearly defined objective is still required to ensure alignment and prevent actions that might undermine the treaty’s effectiveness.

‘Identifying the object and purpose of a treaty is an arduous task’⁹ however, when done correctly, it can be effective in achieving an environmental result. A prime example is the Montréal Protocol to the Vienna Convention for the Protection of the Ozone Layer, which achieved inspirational success by phasing out the production and consumption of ozone-depleting substances (ODS).¹⁰ Widely regarded as ‘one of the most important and successful global environmental treaties ever,’¹¹ it functions as a living instrument, evolving over time in response to new scientific, technical, and economic developments. Like plastics, ODS had

⁴ Greenhouse gases are emitted throughout the entire life cycle of plastics, estimated as between 3.8 and 4.5 per cent of global greenhouse gas emissions. GRID-Arendal “Plastics and Climate Change: policy recommendations” <https://www.grida.no/activities/943> (date accessed: 15 February 2025).

⁵ C. Binder, “Change and the Law of Treaties: The accommodation of change under general international law and in specific treaty regimes” (2024) ESIL Reflections, Volume 13, Issue 2, p 6.

⁶ VCLT *supra* note 4, Article 18.

⁷ Reservations are defined in the VCLT as ‘a unilateral statement, however phrased or named, made by a State, when signing, ratifying, accepting, approving or acceding to a treaty, whereby it purports to exclude or to modify the legal effect of certain provisions of the treaty in their application to that State’. Article 19(a) of the VCLT permits reservations to be prohibited by a treaty, in the case of the ILBI, Article 29 of the Chair’s Text explicitly prohibits reservations.

⁸ INC Chair’s Text, 1 December 2024, Article 29 [hereinafter Chair’s Text].

⁹ A.V. Rydberg, *The Duty to Safeguard the Object and Purpose of Pending Treaties A Closer Examination of Article 18 VCLT*, (Queen Mary Studies in International Law, 2024), Chapter 1, p 1.

¹⁰ The Montréal Protocol on Substances that Deplete the Ozone Layer (adopted on 16 September 1987 entered into force on 1 January 1989).

¹¹ David Fahey, director of NOAA’s Chemical Sciences Laboratory and Co-chair of the Scientific Assessment Panel.

supporters with vested interests, yet despite industry opposition affecting negotiations,¹² the Montréal Protocol went on to be the first treaty unanimously ratified by all United Nations (UN) member states.¹³ Perhaps this speaks to the willingness of countries around the world to work together to save the ozone layer, or perhaps the threat of a trade ban with countries that did not ratify the protocol was, at least in part, a significant motivating factor. The Montréal Protocol was not designed to be a ‘one-and-done’ treaty, but its object and purpose are clear and strong: to protect the ozone layer through the global control, reduction, and ultimately, the elimination of ODS production and consumption.

1. Form Follows Function

Ahead of the INC’s first meeting, the UNEP Secretariat released a document outlining broad structural options for the ILBI.¹⁴ It provided guidance on defining the treaty’s objectives, emphasising the importance of identifying the specific problems it seeks to address or the goals it aims to achieve. The document also highlighted that while some multilateral environmental agreements (MEAs) include explicit provisions defining their objectives, others, such as the Basel Convention,¹⁵ do not. Instead, their objectives are inferred from the preamble,¹⁶ leaving room for the ILBI to adopt a similar approach rather than including a standalone article on objectives.

The INC-1 sessions were highly intensive, bringing together over 2,300 delegates from 160 countries and stakeholder groups.¹⁷ Discussions focused on, *inter alia*, the scope and objectives

¹² Association for Diplomatic Studies and Training “Negotiating the Montréal Protocol on Protecting the Ozone Layer” <https://adst.org/2014/09/negotiating-the-montreal-protocol-on-protecting-the-ozone-layer/> accessed 16 February 2025.

¹³ UNEP, About Montreal Protocol <https://www.unep.org/ozonaction/who-we-are/about-montreal-protocol>, UNEP, The Montreal Protocol: triumph by treaty (20 November 2017) <https://www.unep.org/news-and-stories/story/montreal-protocol-triumph-treaty> both accessed 27 April 2025.

¹⁴ UNEP Doc No. UNEP/PP/INC.1/5, 14 October 2022, “Potential elements, based on provisions in paragraphs 3 and 4 of UN Environment Assembly resolution 5/14, including key concepts, procedures and mechanisms of legally binding multilateral agreements that may be relevant to furthering implementation and compliance under the future international legally binding instrument on plastic pollution, including in the marine environment.”

¹⁵ *Ibid.*, paragraph B2.

¹⁶ ‘The final preambular paragraph of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal... reads: “Determined to protect, by strict control, human health and the environment against the adverse effects which may result from the generation and management of hazardous wastes and other wastes”’ as referred to in UNEP/PP/INC.1/5, *supra* note 14, footnote 7.

¹⁷ INC-1 was held in Punta del Este, Uruguay, from 28 November to 2 December 2022. Multistakeholder session held on 26 November 2022.

of the treaty, obligations and control measures, implementation, monitoring and evaluation, and stakeholder participation. One delegate encapsulated the complexity of the discussions midway through the sessions, stating, ‘we have one giant, global plastic pollution problem, and a thousand suggestions on how to solve it’.¹⁸

Whilst the INC was still finding its footing in the first sessions, there appeared to be common ground on the ILBI’s objective. As reported by Earth Negotiations Bulletin, during INC-1, the INC defined the primary objective of the ILBI as protecting the environment and human health from plastic pollution and ultimately ending plastic pollution’. Delegations emphasised that the ILBI’s objectives should encompass, among other priorities: the environmentally sound management of plastic waste, means of implementation, circular economy approaches, human and labour rights, intergenerational equity, and a just transition.¹⁹

2. Make Paris Count

At INC-2,²⁰ Costa Rica, representing the Group of Latin America and the Caribbean, emphasised the need to prevent and reduce plastic pollution at its source while promoting sustainable consumption and production across the full lifecycle of plastics.²¹ Cameroon called for ‘setting clear and ambitious objectives in the ILBI, drawing lessons from the Stockholm Convention on Persistent Organic Pollutant.’²² Ghana, speaking on behalf of the African States, said that the objective of the ILBI should be ‘to end plastic pollution and protect human health and the environment, taking into account the “One Health” approach’²³ that aims to sustainably balance and optimise the health of people, animals and ecosystems.²⁴ Many states supported aligning the treaty’s objectives with Resolution 5/14 and proposed an emphasis on the marine environment in accordance with said resolution. Views diverged on whether the ILBI should include a time-bound target for ending plastic pollution.²⁵

¹⁸ IISC, Earth Negotiations Bulletin, INC-1 Final, 5 December 2022, Vol. 36 No. 7, p. 7.

¹⁹ *Supra* note 20, p. 3.

²⁰ INC-2 was held in Paris, France, from 29 May to 2 June 2023.

²¹ IISC, Earth Negotiations Bulletin, INC-2 Final, 5 June 2023, Vol. 36 No. 12, 4.

²² IISC, Earth Negotiations Bulletin, INC-2#3, 1 June 2023, Vol. 36 No. 10, 3.

²³ UNEP Doc No. UNEP/PP/INC.2/5, 7 July 2023 “Report of the INC to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of its second session,” A.80.

²⁴ WHO, One Health https://www.who.int/health-topics/one-health#tab=tab_1 accessed 25 March 2025.

²⁵ *Supra* note 24.

The outcome document of INC-2, the zero-draft text, was unveiled in 2023 (Zero Draft).²⁶ Based on the Potential Options for Elements paper,²⁷ the Zero Draft presented two options for the objective of the ILBI. Option 1 proposed that the objective ‘is to end plastic pollution, including in the marine environment, and to protect human health and the environment’, while Option 2 suggested it ‘is to protect human health and the environment from plastic pollution, including in the marine environment.’ Although both options emphasise the goal to end plastic pollution while safeguarding human health and the environment, Option 2 is to be preferred as it explicitly prioritises the protection of human health and the environment. The proposed sub-options for Option 2 are important²⁸ as they emphasise that the goal is to end plastic pollution, making it clear that it is not possible to protect human health and the environment without ending plastic pollution. Additionally, framing the objective around a full lifecycle approach aligns the ILBI with Resolution 5/14. However, while setting clear and ambitious objectives for the treaty is essential, embedding a fixed target date (e.g. 2040) within the ILBI’s objective could be problematic, as failing to meet the goal would require amendments to the ILBI. A more flexible approach would be to place target dates in annexes, allowing for adjustments as needed.²⁹ This incremental approach would enable the ILBI to evolve in response to changing circumstances, a strategy that has proven effective in the Paris Agreement.

The Zero Draft recognises the need to tackle plastic pollution in the marine environment while ensuring a broader focus on all forms of pollution, both on land and at sea. This represents a major shift in the approach to addressing plastic waste, moving away from “end of pipe solutions” to a comprehensive life-cycle strategy. It promotes the reduction of harmful and unnecessary plastic products, including intentionally added microplastics, offering countries different regulatory options ranging from outright bans on production, sale, distribution,

²⁶ UNEP Doc No. UNEP/PP/INC.3/4, 4 September 2023, “Zero draft text of the international legally binding instrument on plastic pollution, including in the marine environment” [hereinafter Zero Draft].

²⁷ UNEP Doc No. UNEP/PP/INC.2/4, 13 April 2023, “Potential options for elements towards an international legally binding instrument, based on a comprehensive approach that addresses the full life cycle of plastics as called for by UN Environment Assembly resolution 5/14”.

²⁸ Zero Draft *supra* note 27, Part 1, 2 Objective, ‘Option 2 sub-options that may be considered pertinent for the end of the paragraph: 1.1 by ending plastic pollution. 1.2 based on a comprehensive approach that addresses the full life cycle of plastic. 1.3 through the prevention, progressive reduction and elimination of plastic pollution throughout the life cycle of plastic by 2040. 1.4 through, inter alia, managing both the utilisation of plastics and plastic waste, while contributing to the achievement of sustainable development’.

²⁹ These views are echoed by The Centre for International Environmental Law (CIEL), see CIEL Annotated Zero Draft of the Plastics Treaty, November 2023. https://www.ciel.org/wp-content/uploads/2023/11/Annotated-Zero-Draft_FINAL.pdf accessed 23 February 2025.

import, and export to more flexible measures aimed at gradual reduction.³⁰ Significantly, the objective set out in the Zero Draft emphasises the protection of human health and the environment, which can be interpreted as a step toward advancing human rights.³¹

Member states and stakeholders submitted their positions both before and after the release of the Zero Draft, reflecting a diverse range of perspectives and proposals. These ranged from advocating for circular economy and recycling initiatives to emphasising upstream measures, including the regulation of chemicals under the ILBI.³² Discussions at INC-2 and INC-3 suggest that many delegates were approaching the negotiations at this stage with a legacy mindset. Also, the perspectives of civil society organisations, such as WWF, advocating for a comprehensive full life cycle approach to plastics regulation, including phasing out unnecessary plastic products with high pollution risks,³³ were reflected in the objective options outlined in the Zero Draft, particularly in Option 2.

3. Revised Zero Draft

During INC-3,³⁴ Contact Group 1 discussed the options for the objective of the ILBI presented in the Zero Draft. Some delegates favoured Option 1 (to end plastic pollution, including in the marine environment, and to protect human health and the environment) while others preferred the more concise Option 2 (to protect human health and the environment from plastic pollution, including in the marine environment).³⁵ Delegates agreed to mandate the preparation of a RZD, based on the compilations of submissions by delegations throughout the week.³⁶ The RZD was later read and discussed during INC-4.³⁷

³⁰ J. Vince, B. Carney, A. N. de Miranda Grilli, V. Dwivedi, A. Stöfen-O'Brien & J. Beyer, "The Zero Draft Plastics Treaty: Gaps and challenges" (2024) Cambridge Prisms: Plastics, Cambridge University Press, Vol. 24, 1–10, p. 3.

³¹ N. O'Meara, "Human Rights and the Global Plastics Treaty to Protect Health, Ocean Ecosystems and Our Climate" (2023) IJMCL Vol 38, 480-515.

³² *Supra* note 31, p. 7.

³³ WWF Report "Putting An End To Plastic Pollution: WWFs Call To Urgently Regulate High-Risk Plastic Products" (20123).

³⁴ INC-3 was held in Nairobi, Kenya, from 13 to 19 November 2023.

³⁵ As reported by IISC, Earth Negotiations Bulletin, INC-3 Final, 23 November 2023, Vol. 36 No. 20, 4.

³⁶ UNEP Doc No UNEP/PP/INC.4/3, 28 December 2023, "Revised draft text of the international legally binding instrument on plastic pollution, including in the marine environment" [hereinafter called "RZD"].

³⁷ INC-4 was held in Ottawa, Canada from 23 to April 2024.

The RZD introduced two new options for the objective of the ILBI. Option 1 prioritises ending plastic pollution through prevention, progressive reduction, and elimination by 2040, while also protecting human health and the environment and emphasising sustainable development.³⁸ Option 2 focuses on protecting human health and the environment, incorporating remediation and waste management, with additional considerations for poverty eradication and a just transition.³⁹

Both options have the *potential* to promote a full life-cycle approach to plastics – it is worth noting that ‘full life-cycle approach’ is contained within a placeholder - but they differ in emphasis. Option 1 explicitly commits parties to eliminating plastic pollution, while Option 2 prioritises downstream measures of waste management according to national priorities. During INC-4, some delegations favoured an approach focused on the full lifecycle of plastic, while others preferred the lifecycle of plastic *waste*.

Private sector participation grew between INC-3 and INC-4, with the number of registered fossil fuel and chemical industry lobbyists rising from 143 at INC-3 to 196 at INC-4.⁴⁰ At the same time, the influence of states suborned by vested interests became more pronounced. The presence of a placeholder in the RZD for both ‘objective’ options in respect of a full life cycle approach to plastic, could be seen as an effort by some parties to steer the ILBI’s focus towards downstream measures. As Vince et al. observes

‘many of the suggestions to reduce the scope of the treaty to the later stages of the plastics lifespan were put forth by states with deep ties to fossil fuel industries, as well as plastics and chemicals producers, further exemplifying the problematic issues of conflicts of interest among actors in this space.’⁴¹

³⁸ RZD, *supra* note 37 Objective Option 1 “The objective of this instrument is to end plastic pollution, including in the marine environment [and other aquatic as well as terrestrial ecosystems], [based on a comprehensive approach that addresses the full life cycle of plastic] [through the prevention, progressive reduction and elimination of [additional] plastic pollution] [by 2040] [and enhanced efforts thereafter], [in order] to protect human health and the environment [from its adverse effects] [and to achieve sustainable development].

³⁹ RZD *supra* note 35 Objective Option 2 “The objective of this instrument is to protect human health and the environment from [the adverse effects of] plastic pollution, including in the marine environment [and other aquatic as well as terrestrial ecosystems], [by ending plastic pollution based on a comprehensive approach that addresses the full life cycle of plastic] [through the prevention, progressive reduction and remediation of [additional] plastic pollution] [management] [and utilisation of plastic and plastic waste] [according to national priorities] [by 2040] [and enhanced efforts thereafter], [and to achieve sustainable development][, poverty eradication and just transition,] [considering the principle of common but differentiated responsibilities and respective capabilities] [as well as financial and technical support].

⁴⁰ *Supra* note 31, p.7.

⁴¹ *Ibid.*

It is important to state in the ILBI's objective that the approach will be based on the full life cycle of plastics in order to align with Resolution 5/14, which mandated the negotiations. A declaration on primary plastics polymers, titled "Bridge to Busan" (Members of the Bridge to Busan, 2024) was launched during INC-4, and reaffirms the UNEA mandate to address the full life cycle of plastics including production. The declaration garnered 33 signatories from member states, and 39 from stakeholders.⁴²

Some delegates expressed a preference for not including a time-bound target in the objectives, with one suggesting it could be addressed in the preamble. Delegations during INC-4 called for a straightforward objective that focuses on "what" the instrument will achieve, rather than "how" it will achieve it, suggesting that the latter would be addressed in the operative provisions. Others preferred a more detailed objective that included elements such as human and animal health, sustainable development, recognition of the significant utility of products, biodiversity, capacity building, and the circular economy.⁴³

4. Bridge to Busan - Beyond the RZD

Following INC-4, Chair Luis Vayas Valdivieso proposed a consolidated objective in Non-Paper 3:⁴⁴ 'to protect human health and the environment from the adverse impacts of plastics, with the ambition of ending plastic pollution, including in the marine environment.'⁴⁵ This wording was intended to reconcile diverging perspectives. However, framing the eradication of plastic pollution as an aspirational goal rather than a definitive objective, risks weakening enforceability. Additionally, whilst plastics play a beneficial role in certain sectors, such as food production and health, the phrase "adverse impacts" could imply that plastics also have positive effects on the environment, an interpretation that may be misleading.

On 1 December 2024, the Chair's Text⁴⁶ refined the objective of the ILBI to aim 'to protect human health and the environment from plastic pollution, including the marine environment [based on a comprehensive approach that addresses the full life cycle of plastics]'.⁴⁷ Whilst this

⁴² *Ibid.* 8.

⁴³ IISC, Earth Negotiations Bulletin, INC-4 Final, 2 May 2024, Vol. 36 No. 27, p. 4.

⁴⁴ Non-Paper 3 of the Chair of the Committee with Comments of the Local and Subnational Governments Coalition to End Plastic Pollution, 22 November 2024.

⁴⁵ *Ibid.*, Article 1.

⁴⁶ INC Chair's Text, 1 December 2024.

⁴⁷ *Ibid.*, Article 1.

version of the objective incorporates a comprehensive approach that addresses the full life cycle of plastics, it again has been included as a placeholder. This reflects the broad consensus on the need for a lifecycle approach, but lack of agreement on its precise scope. From INC-1 an understanding emerged on the need for the ILBI to encompass the *full life cycle* of plastics. At the start of INC-5.1, President Yoon Suk Yeol of the Republic of Korea reinforced this priority, urging delegates to reach an agreement on ‘an effective and implementable instrument covering the full lifecycle of plastics.’⁴⁸

During INC-5.1, Moldova, also on behalf of Georgia and Ukraine, called for stringent measures for primary plastics, and the need to address the entire lifecycle of plastic.⁴⁹ Citing the High Ambition Coalition (HAC), Panama reiterated a commitment to a treaty that addresses the full lifecycle of plastics, including plastic production stating, ‘we did not accept a weak treaty here, and we never will.’⁵⁰ Trinidad and Tobago stressed that ‘action against plastic pollution involves more than just waste management and requires taking into account the full life cycle of plastic.’⁵¹

Taking a life cycle approach means preventing plastic pollution and promoting a safe circular economy for plastics. According to the Environmental Investigation Agency (EIA) this will not be achieved with mid-stream (product design and use) and downstream measures (plastic waste management and treatment) alone. Rather, upstream measures (controlling the production and consumption of virgin plastic polymers) are also needed. The EIA recommends that the ‘parties should strongly consider tackling unsustainable virgin plastic production and consumption via a start-and-strengthen approach, consisting of two main elements: fact-finding and policymaking.’⁵²

Notably, the version of the ILBI’s objective proposed in the Chair’s Text omits several key terms found in the compilation text, including “end plastic pollution,” “biodiversity,” “animal and plant health,” “legacy plastics pollution” and “national circumstances.”⁵³

⁴⁸ IISC, Earth Negotiations Bulletin, INC-5 Final, 3 December 2024, Vol. 36 No.34, p. 3.

⁴⁹ *Ibid*, p. 8.

⁵⁰ *Ibid*.

⁵¹ *Supra* note 49, p. 9.

⁵² Environmental Investigation Agency, “Convention on Plastic Pollution Essential Elements: Virgin Plastic Production and Consumption”, January 2022.

⁵³ UNEP Doc No UNEP/PP/INC.5/4, 9 July 2024 “Compilation of draft text of the international legal binding instrument on plastic pollution, including in the marine environment”.

While the objective set out in the Chair’s Text priorities human health and the environment, the wording takes a broad stroke approach to the “environment”. Whilst it does include the marine environment, it does not specify other aquatic ecosystems (80% of the plastic in the ocean is emitted by more than 1,000 rivers⁵⁴), terrestrial ecosystems, the atmosphere or the cryosphere. This could create an interpretation gap as the ILBI text currently does not contain a definition of “environment” nor is there a ‘commonly agreed definition in international law of concepts of “environment”, either in international environmental law or international humanitarian law.’⁵⁵

To broaden the ILBI’s objective beyond human health, Kenya, supported by Ecuador, advocated for a standalone article on “health, biodiversity, and ecosystems” during INC-5.1.⁵⁶ This motion is also backed by the International Union for Conservation of Nature (IUCN) and World Commission on Environmental Law (WCEL). They argue that a dedicated biodiversity article would ‘advance the interlinkages between plastic pollution and biodiversity in the context of international trade law,’ particularly given that plastic waste is often traded across borders, with developing nations disproportionately bearing the burden of pollution.⁵⁷ Unregulated plastic exports can lead to environmental degradation, harming ecosystems, marine life, and species dependent on clean habitats.⁵⁸ A biodiversity-focused article would promote ‘nature-positive measures and catalyse innovation in plastics that would protect biodiversity, the environment, and human health,’ and ‘[guide] multistakeholder collaboration for midstream solutions... demonstrating how to close the loop for circularity and protect nature and people who depend on such solutions.’⁵⁹

⁵⁴ J. Lourens, J. Meijer et al., “More than 1000 rivers account for 80% of global riverine plastic emissions into the ocean” (30 April 2021), Science, Vol. 7, No. 18. See also The Ocean Clean Up, <https://theoceancleanup.com/scientific-publications/more-than-1000-rivers-account-for-80-of-global-riverine-plastic-emissions-into-the-ocean/> accessed on 29 January 2025.

⁵⁵ Conclusions by the Working Group of Experts on Liability and Compensation for Environmental Damage Arising from Military Activities, in Liability and Compensation for Environmental Damage, Compilation of Documents, para. 30 (Alexandre Timoshenko, ed., Nairobi: UN Environmental Programme 1998) quoted in C. Payne and P. Sand (eds.), *Gulf War Reparations and the UN Compensation Commission: Environmental Liability*, (Oxford University Press 2011).

⁵⁶ *Ibid*, p. 9.

⁵⁷ World Economic Forum, “Charted: The key countries that trade in global plastic waste” (15 March 2023) <https://www.weforum.org/stories/2023/03/charted-the-flow-of-global-plastic-waste/> accessed 26 March 2025 and WWF, “The burden of plastic pollution is not equal. Here’s how the Global Treaty to End Plastic Pollution can help” (7 November 2023) <https://www.worldwildlife.org/blogs/sustainability-works/posts/the-burden-of-plastic-pollution-is-not-equal-here-s-how-the-global-treaty-to-end-plastic-pollution-can-help> accessed 26 March 2025.

⁵⁸ UNEP, Plastic Pollution <https://www.unep.org/plastic-pollution> accessed 26 March 2025.

⁵⁹ International Union for Conservation of Nature and World Commission on Environmental Law, “A global plastics treaty and biodiversity: converging or conflicting regimes?” (2024).

At INC-1, delegations supported an instrument that ultimately ended plastic pollution in alignment with the mandate of Resolution 5/14,⁶⁰ and Kim Wan Sup, Minister of Environment, Republic of Korea, reminded delegates at the start of INC-5.1 that ‘we must end plastic pollution before plastic pollution ends us.’⁶¹ However, by omitting the termination, elimination and prevention of plastic pollution as a means of protecting human health, the environment and the marine environment,⁶² the objective in the Chair’s Text dilutes the broader vision of the RZD. It will be important to specify that the goal of the ILBI is to end plastic pollution, highlighting that such protection cannot be achieved without ending plastic pollution. If the ILBI focuses only on downstream measures, such as waste management, and adopts a ‘business-as-usual’ approach, plastic leakage into the environment will continue on the current trajectory.⁶³

At INC-5.1, Kuwait, for the Like-Minded Group (LMG) - mainly consisting of fossil fuel and polymer-producing countries - underscored that the object of the agreement is ‘to end plastic pollution, not plastic itself.’⁶⁴ Norway, criticised the exclusion of ‘ending plastic pollution’ from the objective ⁶⁵ and Togo stated, ‘the solution to plastic pollution is not just eradicating pollution, but addressing it at the source and respecting the fundamental principles of environmental protection.’⁶⁶ These exchanges highlight the ongoing tension between states advocating for a stronger, more comprehensive objective to tackle plastic pollution at its source and those seeking to narrow its scope, reflecting the broader struggle to reconcile environmental ambition with economic and political interests.

5. Conclusion

We cannot solve our problems with the same thinking we used when we created them

Delegates remain divided between prioritising upstream measures, targeting production, manufacturing, and design or settling for the more “agreeable” downstream options, the ‘lowest

⁶⁰ *Supra* note 3, 3(e), p. 4.

⁶¹ *Supra* note 49.

⁶² See UNEP document UNEP/PP/INC.5/4, *supra* note 54.

⁶³ F. Cornehl et al., “Plastic Treaty Futures: Assessing Alternative Scenarios for the Treaty,” SYSTEMIQ, 2024, <https://www.systemiq.earth/reports/plastictreatyfutures> accessed 1 February 2025.

⁶⁴ *Supra* note 49, p. 8.

⁶⁵ *Ibid.*

⁶⁶ *Ibid.*, p. 9.

common denominator in the negotiations.’⁶⁷ The HAC advocates for upstream measures, addressing plastic at its source, curbing polymerisation – the materials process by which plastic comes into existence - and turning off the tap at plastic production. In contrast, the LMG favours downstream responses, which risks prioritising short-term gain over long-term sustainability. There is concern that the ILBI will be weakened if the HAC concedes to an agreement focused solely on downstream measures, restricting its scope to waste management and treatment rather than addressing plastic pollution at its source.⁶⁸

The era of disposability is coming to an end, yet the strong presence of industry stakeholders in treaty negotiations⁶⁹ risks a myopic focus on plastic pollution. Delphine Levi Alvares, Global Petrochemical Campaign Manager at the Centre of International Environmental Law (CIEL), describes how ‘from the moment the gavel came down at UNEA-5.1 to now, we have watched industry lobbyists surrounding the negotiations with sadly well-known tactics of obstruction, distraction, intimidation, and misinformation’. She affirms that ‘the mandate for this treaty is very clear: ending plastic pollution. Ever-growing evidence from independent scientists, frontline communities, and Indigenous Peoples clearly shows that this won’t be achieved without reducing plastic production. The choice is clear — our lives or their bottom line.’⁷⁰

The INC has an opportunity to bridge the gaps in the Basel Convention and deal with the problem of plastic pollution at a systemic level. The INC should extend the objective of the ILBI beyond waste and address the entire lifecycle of plastics, especially the production phase and take a holistic approach that integrates production, consumption, and waste management, including promoting Extended Producer Responsibility (EPR) and circular economy practices. For Graham Forbes, Greenpeace Head of Delegation to the Global Plastics Treaty negotiations and Global Campaign Lead for Greenpeace USA, ‘member states must deliver a Global Plastics Treaty that prioritizes human health and a liveable planet over CEO payouts. The

⁶⁷ *Supra* note 49, p. 10.

⁶⁸ IISC “Breaking the Deadlock in the Plastics Negotiations” 25 January 2025, https://sdg.iisd.org/commentary/guest-articles/breaking-the-deadlock-in-the-plastics-negotiations/?utm_medium=email&utm_campaign=SDG%20Update%2030%20January%202025&utm_content=SDG%20Update%2030%20January%202025+CID_85bce416e865e79db3aa0da4154035ea&utm_source=cm&utm_term=Read accessed on 30 January 2025.

⁶⁹ An analysis by the Centre for International Environmental Law (CIEL) revealed the extensive participation of fossil fuel and chemical industry representatives at INC-5. Centre for International Environmental Law “Fossil Fuel Lobbyists Flood Final Scheduled Round of Global Plastics Treaty Negotiations” (November 2024) <https://www.ciel.org/news/inc-5-lobbyist-analysis/> accessed on 19 December 2025.

⁷⁰ *Ibid.*

global majority demands a strong agreement that cuts plastic production and ends single-use plastics.⁷¹

To uphold the text and spirit of UNEA resolution 5/14, the ILBI's overarching objectives must be at least twofold: (i) to protect human health and the environment and (ii) to phase out harmful plastics and end plastic pollution across the life cycle of plastics.

A life-cycle approach to plastic pollution should incorporate innovative solutions, integrate traditional and local knowledge, and promote a shift toward a circular and sustainable plastics economy, ensuring a fair and just transition. Sufficient financial, technical, and technological support, along with capacity-building, is essential to achieving the ILBI's objectives. Additionally, effective outreach is needed to address poor plastic waste management and increase public awareness of plastic pollution, fostering behavioural change.

B. Definitional Divides in the Global Plastics Treaty

1. Setting the Terms

In MEAs, definitions may appear in a dedicated article on "definitions" or "use of terms," or they may be embedded within substantive or procedural provisions, chapters, or annexes. Some MEAs do not explicitly define key terms; instead, meanings are clarified using a criteria-based approach or inferred from the treaty text, such as the preamble, objectives, or listed provisions. For the ILBI, definitions could be drawn from existing treaties, related processes, scientific literature, or other relevant sources, where internationally recognised definitions do not yet exist, new terms may need to be developed specifically for the ILBI.

In June 2022, the *ad hoc* open-ended working group requested the INC Secretariat prepare a glossary of key terms to inform the negotiations. Two informational documents were developed in response to this request, UNEP/PP/INC.1.6 ("Glossary of Key Terms")⁷² and

⁷¹ *Ibid.*

⁷² UNEP Doc No UNEP/PP/INC.1/6 "Glossary of Key Terms" 8 September 2022.

UNEP/PP/INC.1/7 (entitled “Plastics Science”).⁷³ Ahead of the INC’s first meeting, the UNEP Secretariat released the *Potential Options for Elements* paper,⁷⁴ which did not seek to define any terms at that stage but, instead compiled a list of concepts referenced in submissions which were identified in UNEP/PP/INC.1/6, and Appendix I of document UNEP/PP/INC.1/7. The *Potential Options for Elements* paper explicitly stated that this list would need to be reviewed and refined as negotiations progressed.⁷⁵

Despite calls from members during INC-2 for clear definitions of terms such as “problematic and avoidable plastic products,” “circularity,” “microplastics,” and potential products containing “intentionally added microplastics,” no specific language was proposed for definitions in either the Zero Draft or the RZD. In some instances, footnotes in the Zero Draft provide guidance on the intended use of terms like “regulated plastic products” and “national plans” helping to clarify the proposed text and its potential scope. Additionally, the Zero Draft references terms relevant to the development of the ILBI, as outlined in the documents UNEP/PP/INC.1/6 and UNEP/PP/INC.1/7.⁷⁶ The RZD considers whether definitions should be placed in a standalone article, integrated into the substantive provisions, or a combination of both.⁷⁷

At INC-3, many delegates in Contact Group 3 expressed support for using existing internationally agreed definitions, while others advocated for incorporating additional definitions based on the best available science. Some countries highlighted that definitions impact the overall scope of the ILBI and suggested conducting intersessional work. Other delegations called for definitions of “plastic,” “plastic pollution,” “microplastic,” “problematic and avoidable plastic,” “EPR,” “legacy plastic,” and “energy recovery.”⁷⁸

Despite a growing consensus at INC-3 on the need for the treaty to cover the full life cycle of plastics,⁷⁹ a clear definition of “life cycle” has yet to be agreed upon. The term, referenced in Resolution 5/14 and present in all versions of the treaty text, remains undefined. Different

⁷³ UNEP Doc No UNEP/PP/INC.1/7 “Plastics Science” 13 September 2022.

⁷⁴ *Supra* note 16.

⁷⁵ *Ibid*, section B.

⁷⁶ Zero Draft *supra* note 27, footnote 2.

⁷⁷ RZD *supra* note 37, footnote 7.

⁷⁸ IISC, Earth Negotiations Bulletin, INC-3 Final, 23 November 2023, Vol. 36 No. 20, p. 4.

⁷⁹ Representative speaking on behalf of the Asia-Pacific States stated a ‘comprehensive life-cycle approach was required to address more directly the issue of legacy, present and future plastic pollution, including in the marine environment’, see UNEP document UNEP/PP/INC.3/L.1, para-A.30. See also, written submissions on elements addressed in the synthesis report of Contact Group 3 at INC-3, 18 November 2023.

views on when the lifecycle of plastics begins, and ends have endured throughout the sessions, with some states advocating for addressing the early stages of plastic production, while others prioritise starting at the product design phase.

At INC-4, delegates agreed to postpone discussions on definitions, deeming it premature at that stage of the process.⁸⁰ However, several representatives stressed the importance of including clear definitions of the key terms and concepts in the future instrument to ensure coherence and consistency in the actions of the parties once the instrument is adopted.⁸¹ As reported by Earth Negotiations Bulletin, a delegate during INC-4 highlighted the need to define “plastic pollution” in relation to health, emphasising that there is currently ‘no direct linkage between plastic pollution and health’ and that any such linkage should be based on best available science.⁸²

Non-Paper 3 suggested that definitions for general terms used in the ILBI (to be identified during INC-5) and cross-cutting terms like “plastic products” and “microplastics,” as well as terms not generally understood, should be included in a standalone article. Non-Paper 3 also proposed that specific terms relevant to articles should be defined within those articles themselves. General terms, “party” and “regional economic integration organization,” are defined in Article 2 of Non-Paper 3, with placeholders provided for the terms “plastics,” “plastic products,” “plastic waste,” and “microplastics.”

The Chair’s Text contains a dedicated article for definitions (Article 2), but suggests, as an alternative that definitions can be addressed in the annex to the ILBI, ‘providing for a more flexible approach to any future adjustments.’⁸³ Article 2 of the Chair’s Text provides definitions for “plastic,” “plastic products” and “regional economic integration organisation,”⁸⁴ but fails to provide a robust set of definitions. It also presents two options for defining “plastic pollution”. Option 1 being ‘pollution caused by or released throughout the life cycle of plastics and Option 2, “all emissions and releases resulting from plastic production, use, waste management and leakage from different sources and pathways”.

⁸⁰ *Supra* note 44, p. 4.

⁸¹ UNEP 6 May 2024 Doc No UNEP/PP/INC.4/5 6 May 2024, “Report of the INC to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of its fourth session” A.53, p. 11.

⁸² *Supra* note 44, p. 7.

⁸³ *Supra* note 10, footnote 2.

⁸⁴ *Supra* note 47, Article 2.

Option 2 closely aligns with the Organisation for Economic Co-operation and Development’s definition, which encompasses ‘all emissions and risks from plastics’ production, use, waste management, and leakage’.⁸⁵ Option 2 offers a holistic and inclusive definition of “plastic pollution,” acknowledging that addressing plastic pollution requires solutions across multiple stages of the plastics life cycle.

Given the ongoing debate over when the plastics life cycle begins, it is unsurprising that the Chair’s Text omits a definition of “life cycle” or “full life cycle approach”. It is worth noting that the latter is not a term adopted or endorsed by any intergovernmental process. However, according to Systemiq, ‘the full lifecycle perspective encompasses the entire plastics journey, from production and use to disposal and recycling, advocating for comprehensive measures that address the root causes of plastic pollution (e.g., reduction and redesign).’⁸⁶ To ensure clarity and effectiveness, the final treaty text should include a well-defined and precise definition reflecting this holistic approach.

Several terms used in Resolution 5/14 remain undefined in the Chair’s Text, such as “environmentally sound waste management,”⁸⁷ “microplastics,”⁸⁸ “technology transfer,”⁸⁹ “sustainable production and consumption,”⁹⁰ and “traditional knowledge”.⁹¹ However, these terms have been adopted or endorsed through other intergovernmental processes. Other terms

⁸⁵ *Supra* note 63.

⁸⁶ *Ibid.*

⁸⁷ Environmentally sound waste management means taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes. See Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Article 2 (8).

⁸⁸ Microplastics refers to plastic particles less than 5 millimetres in diameter, including nano-sized particles. See UNEP Resolution 2/11, “Marine litter and microplastics”, Paragraph 1 and Document UNEP/PP/INC.1/6, footnote 3. NB: this definition does not include intentionally added microplastics.

⁸⁹ Technology transfer means the transmission of know-how, equipment and products to governments, organisations or other stakeholders. It usually also implies adaptation for use in a specific cultural, social, economic and environmental context. See UNEP, Glossary of Terms for Negotiators of Multilateral Environmental Agreements (Nairobi, 2007), 91. See document UNEP/PP/INC.1/6, footnote 8.

⁹⁰ Sustainable production and consumption refer to the use of services and related products which respond to basic needs and bring a better quality of life while minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardise the needs of further generations. This definition was provided by the Norwegian Ministry of Environment at the Oslo Symposium on Sustainable Consumption in 1994 and has since become the most widely accepted definition of the term “sustainable consumption and production”. See document UNEP/GC.26/7 (2010), footnote 3 and document UNEP/PP/INC.1/6.

⁹¹ Traditional knowledge is the knowledge, innovations and practices of indigenous [peoples] and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity. See Convention on Biological Diversity, Article 8 (j); The secretariat notes that the term used in UN Environment Assembly Resolution 5/14 is “traditional knowledge, knowledge of indigenous peoples and local knowledge systems”. See document UNEP/PP/INC.1/6, footnote 9.

which appeared during INC sessions are also widely agreed-upon, such as “abandoned, lost, discarded fishing gear” as is defined by the UN Food and Agriculture Organisation.⁹² In contrast, “plastics pollution,” “full life cycle approach” and “environment” lack a universally agreed-upon definition in international law. When compiling existing definitions for their document, *Compilation of Key Terms Relevant for the Negotiation of a Treaty to End Plastic Pollution*, the CIEL identified an important gap relating to the upstream stage of the full lifecycle of plastics.⁹³ While there is focus on downstream processes, such as waste management or recycling, definitions and concepts pertaining to the early stages of plastic production and design are largely underdeveloped or missing altogether. This upstream gap is crucial because the production, design, and materials used in plastic products play a fundamental role in determining their eventual impact on the environment. Without clear definitions addressing these upstream aspects, efforts to prevent plastic pollution may be limited, as they fail to tackle the root causes of plastic production and waste generation.

2. The Road to INC-5.2

By establishing clarity and consistency throughout the instrument, definitions of key terms will play an important role in implementing the ILBI. Clear definitions of terms used in the ILBI will help to prevent misunderstandings and disputes that could arise from different interpretations.

Resolution 5/14 provides that the objective of the ILBI is to end plastic pollution and emphasises that the treaty should adopt a comprehensive approach covering the entire life cycle of plastic. However, Resolution 5/14 does not define plastic pollution nor life cycle approach and, therefore, clarifying the definitions of these key terms in the ILBI at INC5.2 will be important as they relate to the objective and overall scope of the treaty.

⁹² *Supra* note 25, B.9(74), p. 20.

⁹³ CIEL, *Compilation of Key Terms Relevant for the Negotiation of a Treaty to End Plastic Pollution* (28 May 2023).

At the end of INC-5.1, a number of representatives said that the resumed fifth session should begin with discussion of the scope and definitions of the treaty, given the lack of shared understanding in those areas.⁹⁴ One representative suggested that an expert group should be established to work on definitions for the instrument and present that work at INC-5.2.⁹⁵

The definitions of key terms used in the ILBI should be contained in a standalone article with more specific terms, such as “technology transfer” (and details on how it works on mutually agreed terms), integrated into substantive provisions within the ILBI. Care should be taken by the INC to avoid interpretation gaps, for example in the context of the “environment” and, to bridge gaps, like the one identified by CELF in relation to the upstream stages of the plastic lifecycle. Definitions throughout the ILBI should include terms that are strictly necessary to provide clarity on obligations and to facilitate implementation. The ILBI should contain clear, science-based definitions related to “plastic pollution,” “microplastics,” “circularity” and “substances of concern” in plastics.

⁹⁴ UNEP Doc No UNEP/PP/INC.5/8 10 February 2025 “Draft report of the INC to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of the first part of its fifth session”, E.85, p. 13.

⁹⁵ *Ibid*, E. 87, p. 14.

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Chapter 3

Scope of Application

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This chapter is intended to explore the evolution of the scope of the ILBI throughout the proceedings (thus far) of the INC sessions 1-5. This research indicates that the scope has been highly malleable, perhaps even excessively so, over the course of all the INCs, and the scope is still not clearly defined for the ILBI. A core scope is required in order to provide an arena of focus for objectives and measures to be efficiently assembled, agreed upon, and applied under the ILBI. “Scope” will be defined, drawing attention to its breadth of definition. The necessity of a well-defined scope in international treaties concerning pollution will then be illustrated using examples. The malleability of the scope over the course of INCs 1-5 in the effort to arrive at an agreed ILBI, will be examined by drawing attention to relevant aspects of the successive INC reports, together with the Zero Draft,¹ the RZD,² and the fifth version of the informal document known as the Chair’s Text.³ Particular effort is made to demonstrate that rather than the scope becoming increasingly focused over the course of the INCs, the evolution of the scope has been rather chaotic, leaving the current ILBI still without a clearly defined scope.

A. The contextual importance of scope for the ILBI

From the outset it is useful to examine the broader concept of what scope can mean, and what it can represent in the legal context of a treaty, negotiation, or contract. Here, two purposefully neutral interpretations are offered from diverse sources. The first provides a more general understanding of ‘scope’ and how effective a clearly defined scope can be.

‘Scope Boundaries: A well-defined project scope statement defines the boundaries of the project, specifying what is included (in-scope) and what is excluded (out-of-scope) the

¹ Zero Draft Doc No UNEP/PP/INC.3/4 - submitted prior to INC-3. [hereinafter Zero Draft.

² RZD Doc No UNEP/PP/INC.4/3 - submitted after INC-3 [13-19 November 2023].

³ INC Chair’s Text, 1 December 2024 [hereinafter Chair’s Text].

project team can focus on what is necessary to achieve the project's objectives, reducing the likelihood of unnecessary work or changes to the project's scope. This can result in the project being delivered on time, within budget, and meeting the stakeholders' expectations.'⁴

The second interpretation raises a broader issue highly pertinent to, but not directly associated with, the INC and ILBI creation process being investigated. This interpretation interestingly reminds us that the issue of having a rigid scope in international treaties is not as fixed as may be presumed. However, for a treaty to be effective, it emphasises that a binding treaty must effectively delineate the obligations it contains. This interpretation becomes increasingly relevant to the loosening of the scope evident throughout the later INCs.

'Generally, existing human rights treaties do not have a provision on scope as they are understood to be binding on all state signatories...The focus is instead on the signatory states' duties to act in accordance with the provisions of the treaty. There is thus no need to decide on who is bound by the treaty – it is clear that it is signatory states that are so bound. The real question is the nature of the obligations undertaken by states. The operational provisions of the treaty define those obligations.'⁵

The Montreal Protocol, Basel Convention and Stockholm Convention, all involve international cooperation to deal with pollutants at an international level. The contexts of these three treaties are different, and they have indeed been amended by annexes or revised over time. What they do have in common are clear opening sections defining, scope, definitions, and obligations followed by measures on how to tackle the problem.

⁴ fundsforNGOs – an international organisation (180+ countries) supplying information for the establishment of Non-Governmental Organisations, available at <https://www.fundsforngos.org/proposals/importance-of-defining-a-projects-scope/> (date accessed: 23 February 2025). Chosen as a neutral, non-academic, yet professional source of definition for 'scope' in a multinational and broad governmental context.

⁵ David Bilchitz, 'Why a scope clause in the binding treaty on business and human rights is unnecessary' December 2024, available <https://www.business-humanrights.org/en/blog/why-a-scope-clause-in-the-binding-treaty-on-business-and-human-rights-is-unnecessary/> (date accessed: 23 February 2025).– This scope definition provides a legal perspective on whether scope is necessary by a scholar explaining challenges to an international treaty formulation that, although not directly related to INC, does have perspectives that are transferable to the ILBI context.

The ‘Montreal Protocol on Substances that Deplete the Ozone Layer’ [January 1989] opens with a concise general scope, followed by ‘Article 1. Definitions’.⁶ The ‘Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal’ adopted 22 March 1989, revised most recently in 2023, starts with a clear pattern. ‘Article 1 Scope of the Convention’ identifying in general the ‘Hazardous Wastes’ with which the Basel Convention is concerned, followed by ‘Article 2 Definitions’, ‘Article 3 National Definitions of Hazardous Wastes’ and ‘Article 4 General Obligations’.⁷ The Basel Convention, which focuses from the outset on the types of pollutants to be dealt with, is worthy of note as a draft template with layout characteristics that are potentially pertinent to the ILBI. The ‘Stockholm Convention on Persistent Organic Pollutants (POPs)’ 22 May 2001, which came into force 17 May 2004, starts with a similar structure, an opening scope description prior to the articles, ‘Article 1 Objective’, ‘Article 2 Definitions’, ‘Article 3 Measures to reduce or eliminate release from intentional production and use’.⁸ Clearly defining scope at the outset is a valid approach, as dealing with a complex problem requires clear identification of what is being dealt with, which is set out in all three examples in the scope (for more information re: definitions and objectives please see chapter 2).

B. The scope as per INC-1 Punta del Este, Uruguay, 28 November–2 December 2022

The first report opens with a straightforward statement in ‘Introduction.1’ which can be perceived as a broad interpretation of the initial Scope,

“In resolution 5/14 of 2 March 2022 entitled “End plastic pollution: towards an international legally binding instrument”, the UNEA of the UNEP requested the Executive Director of the

⁶ Montreal Protocol on Substances that Deplete the Ozone Layer’ (January 1989) Available <https://treaties.un.org/doc/Publication/UNTS/Volume%201522/volume-1522-I-26369-English.pdf> accessed 29 March 2025. p 29-30.

⁷ Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (2023) available <https://www.basel.int/theconvention/overview/textoftheconvention/tabid/1275/default.aspx> accessed 29 March 2025.

⁸ Stockholm Convention on Persistent Organic Pollutants (POPs) [2023]. Available http://chm.pops.int/Portals/0/Repository/convention_text/UNEP-POPS-COP-CONVTEXT-FULL.English.PDF accessed 29 March 2025.

UNEP to convene an INC to begin its work during the second half of 2022, with the ambition of completing that work by the end of 2024.

The UNEA also decided that the INC was to develop an ILBI on plastic pollution, including in the marine environment, which could include both binding and voluntary approaches, based on a comprehensive approach that addressed the full life cycle of plastic, taking into account, among other things, the principles of the Rio Declaration on Environment and Development, as well as national circumstances and capabilities...’⁹

Although the INCs have been negatively portrayed as not having yet fulfilled their purpose within their predetermined timeframe, to be fair this goal is defined from the outset as an ‘ambition’ rather than an absolute fixed goal. It is also significant to note that from the outset a potentially contradictory phrase is used, ‘an international legally binding instrument’ the mandatory statement of which is loosened to ‘include both binding and voluntary approaches’. It can be viably argued that the semantic dichotomy of these terms is a recurrent feature throughout the analysis of ‘scope’ in all the INCs. From the outset in INC-1 the scope although general, does have its broader working boundaries defined including a clear statement of ‘a comprehensive approach that addressed the full life cycle of plastic’.

By the close of INC-1 the following contours of its scope had been reaffirmed. The development of a future legally binding instrument, which deals with the full life cycle of plastics to the benefit of humans and the broader environment, facilitated by the future development of specific means and need-assessed allowances. The concept of an approach involving a combination of core obligations, control measures, and voluntary approaches is agreed upon, with National Action Plans (NAPs) being seen as a matter of course for a successful approach. This is to be supported by a combination of monitoring and supporting mechanisms, enabled by accompanying financial and technical support. Broader education and public awareness are identified as critical, along with the need for the inclusion of a wider

⁹ INC-1 was held in Punta del Este, Uruguay, from 28 November to 2 December 2022. UNEP/PP/INC.1/14 [Hereinafter INC-1 Report] available: <https://wedocs.unep.org/bitstream/handle/20.500.11822/42282/INC1reportReissuedAdvance.pdf> Accessed 23 February 2025 para 1,2.

range of sectors, both formal and informal, as well as active participation of developing and developed countries.¹⁰

Particular attention should be paid to the emphasis in Paragraph 91 of the INC-1 Report, where the broader scope foundations indicated in paragraph 1 are clearly reaffirmed for application to INC-2, which should

‘prepare for consideration by the committee at its second session a document with potential options for elements towards an ILBI, based on a comprehensive approach that addressed the full life cycle of plastics as called for in UNEA resolution 5/14, including identifying the objective; substantive provisions including core obligations, control measures and voluntary approaches; implementation measures and means of implementation. The committee specified that the document could include both legally binding and voluntary measures...’¹¹

An initial assessment of the final report of INC-1 appears to offer a broad consensus in terms of scope, as outlined at the beginning and at the end of Paragraphs 1, 90 and 91. However, further analysis of the closing Annexes (Annex I, Annex II) reveals the emergence of a less uniform scope focus. As this analysis of scope will demonstrate, this branching of interests diverges considerably throughout the course of the remaining INCs. The addendum annexes at the close of the seemingly holistic INC-1 is where the forking of the paths first appears,

‘With respect to scope, most delegations expressed support for a comprehensive approach addressing the full life cycle of plastics, protecting human health.’¹² In the subsequent paragraph denoting objectives, a blurred boundary between the dimensions of scope and objectives first emerges. ‘For objectives, several delegations identified the desire for a broad and ambitious objective. Some Members identified the protection of human health and the environment from the negative impacts of plastic pollution as the primary objective of the instrument. Another group of countries stressed an inspirational objective [of] “ending plastic pollution”. Others emphasised the need to address problematic plastics and ensure the

¹⁰ *Ibid.* para 90.

¹¹ *Ibid.* para 91.

¹² *Ibid.* Annex II para 7.

environmentally sound management of plastic waste; to enable a circular economy and economic transformations; to promote sustainable production and consumption'.¹³

Now the apparently holistic goal of 'most delegations' for the 'ending of plastic pollution' has a different focus of emphasis, being whether to comprehensively address the full life cycle of all plastics from source to end.

The core issue analysts should keep in mind is which path is most effective for achieving the apparently common goal of eliminating plastic pollution? The full life cycle approach, including upstream and downstream, or an emphasis on downstream remedies, to enable 'economic transformations' with a 'sustainable production and consumption' approach that of itself is unrealistic in the ultimate plastic pollution reduction goal.

C. The scope as per INC-2 Paris, 29 May–2 June 2023

In terms of scope, INC-2 can be interpreted as logically progressing from the broader scope defined in INC-1. The opening tenet of INC-1 is repeated, to which is added by the Chair of the INC, Ambassador Gustavo Meza Cuadra, that 'a successful international legally binding instrument on plastic pollution, including in the marine environment, would consider the whole life cycle of plastics, ensuring sustainable production and consumption and addressing the issue of legacy plastics, and above all, it would be implementable'.¹⁴ As is apparent at this point, the scope still clearly includes the concept of a legally binding instrument wherein voluntary approaches are acceptable. The need to consider the whole life cycle of plastics is also reaffirmed in the scope of INC-2. INC-2 does not readjust the broad boundaries of the scope in INC-1, but it does indicate a shift towards how these boundaries are to be addressed in

¹³ *Ibid.* Annex II para 8.

¹⁴ INC-2 was held in Paris, France, from 29 May to 2 June 2023, UNEP/PP/INC.2/5 (Hereinafter INC-2 Report) available: <https://wedocs.unep.org/bitstream/handle/20.500.11822/42953/FinalINC2Report.pdf> Accessed 23 February 2025 paras 1,2, 5.

correlation with the objectives. The emphasis on the word ‘implementable’ in the opening address is indicative of this.

The goal of a circular economy is emphasised throughout INC-2, as is the need for harmonising the concept of state sovereignty with an overarching internationally binding instrument. NAPs and multiple issues of approach for how potentially to assist countries financially are also recurrently emphasised. A means-adjusted approach, with transparency of funding approaches and sharing of technologies and monitoring of results, forms the core of the INC-2 scope. At this point referral to the UNEA 5/14 resolution is appropriate. Annex III, stated at the close of INC-1, serves as a useful exemplary source document. It provides an example ‘that addresses the full life cycle of plastics, as called for by UNEA resolution 5/14, including identifying the objective, substantive provisions including core obligations, control measures, and voluntary approaches, implementation measures, and means of implementation.’¹⁵ This document clearly affirms a need for a ‘multiple path’ approach to achieve the goal, by ‘[r]ecognising the wide range of approaches, sustainable alternatives and technologies available to address the full life cycle of plastics, further highlighting the need for enhanced international collaboration to facilitate access to technology, capacity-building, and scientific and technical cooperation, and stressing that there is no single approach’.¹⁶

The multiple approaches outlined in UNEA resolution 5/14 require various adaptations to sources and objectives, particularly in terms of financial facilitation, to achieve the stated goals. INC-2 acknowledges these complexities and represents the multiple perspectives shared; however, it offers little in terms of concrete solutions. The need for a move from a linear plastics economy to a circular economy is acknowledged. However, the emphasis on taking a downstream approach that upscales the capacity for recycling plastics, relative to reduction of upstream production, varies according to proponents.¹⁷ This is a recurrent theme in INC-2 and throughout the future INCs. It is not simply limited to binary perspectives between nations that produce plastics, and less wealthy nations in the global south that are most adversely affected by transboundary pollution.

¹⁵ *Supra* n.9 INC-1 Report p16

¹⁶ UN Environment Assembly of the UN Environment Programme Fifth session Nairobi, 22 and 23 February 2021 and 28 February–2 March 2022 UNEP/EA.5/Res.14 [hereinafter: UNEP/EA.5/Res.14] available: <https://www.gdrc.org/uem/waste/plastics/UN-plastic-resolution.pdf> accessed 23 February 2025 p3.

¹⁷ *Supra* n.15 Inc-2 Report para 9 & para 10.

This polarity does occur to some degree, but it is not strictly binary, rather it is also nuanced across the broad spectrum of proponents. For example, the representative of Ghana, speaking on behalf of the African States, does indeed call for a reduction in upstream plastics, but also calls for measures to enhance the efficiency of downstream waste management. They request an

‘instrument [that] should include provisions to promote sustainable production and consumption of plastics, including enhanced innovation for alternatives, improved product design and environmentally sound waste management, all based on the principles and practices of circularity. The governance structure should promote reduced production and use of plastics and efficient management of plastic waste.’

To achieve this requires a ‘financial mechanism ... that took into consideration the special circumstances of developing countries and countries with economies in transition, particularly Small Island Developing states (SIDs), with mechanisms to ensure transparency in accessing funds, including grants and concessionary loans.’¹⁸

Another perspective is offered by the representative of the Philippines, speaking on behalf of the Asia-Pacific States, who advanced the view that for downstream plastic waste management,

‘[a]dequate financial, technical and technological assistance and capacity-building were required to achieve the objectives, as well as outreach to tackle ineffective management of plastic waste and raise public awareness of plastic pollution, thereby encouraging behavioural change. The needed life-cycle approach to plastic pollution should include innovative solutions, application of traditional and local knowledge and a transition to a circular and sustainable plastics economy that supported a fair and just transition, while also acknowledging that plastics had a positive role to play in society.’¹⁹

The two representatives are not simply calling for a phase-out of plastics; rather, they are advocating for different scopes of approach to funding, in order to achieve the goals of the ILBI through different means, dependent upon their contexts. These various advocated scopes include, indigenous knowledge, circular economies, technological development, local

¹⁸ *Ibid.* para 80.

¹⁹ *Supra* n.15 Inc-2 Report para 81.

education development, enhanced technology for waste management, contextual funding systems, all the while acknowledging the viability of continued plastics use. In short, multiple targets are within the discussion but they are not separated into a clean division of scope, objectives, and how to achieve the objectives.

This lack of unity on specific approaches adds additional complications. The representative of Mauritius, speaking on behalf of the HAC²⁰ strongly advocates for a reduction in plastics at the source. However, they acknowledge that, where production continues, it should be transparent and, in accordance with appropriate scientific technology, monitored and labelled. They also emphasise the importance of remediation citing ‘disproportionate negative socioeconomic and environmental consequences of plastic pollution for developing countries’.²⁰ Additional perspectives call for the identification and phasing out of particularly hazardous plastics, while still advocating a circular economy.²¹ This cornucopia of potential solutions is not indicative of the complete range of views, but it does demonstrate that even among the states most directly affected by continued global plastic production, there is no united front in INC-2 on how to prevent upstream plastic. Simultaneously, as identified in the previous paragraph, a great deal of attention is being given to the diverse financial means of addressing downstream plastic pollution.

Similarly, there is divergence over the use of NAPs and whether or not they should be legally binding. It might be proposed that such disparity of perspectives on NAP might be prevented by clarity on how NAPs are to be used. As nations less immediately disadvantaged by ongoing plastic production may raise a preference for the domestic development of non-binding NAPs, so may states less financially able to manage waste management without financial assistance, be inclined to advocate for less binding NAPs.²² By contrast, the issue has been raised that voluntary accountability from producers presents legal issues in applying the polluter pays principle.²³

The scope in INC-2 has developed to become less clearly defined than it had been in INC-1. The fact that this is not specified in any single section is indicative of a lack of focus on scope.

²⁰ *Ibid.* para 84.

²¹ *Ibid.* para 86.

²² *Ibid.* Annex II Section III – A. National Action Plans.

²³ *Ibid.* Section V- para 57.

The scope in INC-2 consists of a wide range of issues within very broad global boundaries. This is perhaps best illustrated by multiple requests for the scope²⁴ to receive more attention in future INCs and in the Zero Draft.

D. The scope as per INC-3 Nairobi, 13–19 November 2023

INC-3 is preceded by a Zero Draft summary (4 September 2023)²⁵ and followed by a RZD summary (28 December 2023 REF)²⁶ released immediately prior to INC-4. Unlike INC-2, INC-3 has a standalone ‘scope’ section, which had been requested by some members for INC-3. Yet, this new ‘scope’ section, although it has evolved, has not become a particularly powerful tool for ILBI development. Because of feedback from INC-3 members, the more focused Revised Zero Draft in essence maintains the scope elements identified already in INC-1 and INC-2. An analysis of the RZD indicates that the scope, at a point that is already over halfway through the proceedings, appears to have become reduced in focus. Much has been repeated, and a stronger binary effect of interests than had been identified in INC-2 is emerging. However, the lens through which a clearly defined scope could contribute to a final ILBI, is less apparent than the RZD might imply.

Ultimately, existing scope elements are reidentified, while some new elements are simply acknowledged. However, little focus on a potential solution to the initial broad scope presented in INC-1 is offered. The INC-3 report is analysed in terms of scope, with reference to both the changes in scope in the preceding Zero Draft and the scope in the RZD.

It is useful to draw attention to the accompanying statement to the Zero Draft that it was issued to assist the INC-3 committee in their judgments by identifying from INC-1 and INC-2 areas of, ‘convergence of views on options or on the removal of options, and on gaps and ideas on ways to address them’. It is also clarified that the purpose of the text was not to ‘prejudge’ the committee and that they were free ‘to remove completely any of the provisions in the text’.²⁷ Indeed, as will be examined in forthcoming analyses of INC-4 and INC-5, in INC-3 it is

²⁴ *Ibid.* para 11, para 46, Section 9 – para 90, Annex II Section III B – Para 11, Annex II Section IV - para 49.

²⁵ *Supra* n.1 Zero Draft Summary.

²⁶ *Supra* n.2 RZD Summary.

²⁷ INC-3 was held in Nairobi, Kenya, from 13 to 19 November 2023 UNEP/PP/INC.3/5 [hereinafter INC-3 Report] available: <https://wedocs.unep.org/bitstream/handle/20.500.11822/44760/INC3ReportE.pdf> accessed 25 February 2025 para 39.

specifically stated that, '[m]embers were encouraged to use the opportunity afforded by the present session to fill in those gaps and to improve on the draft text'.²⁸ In terms of scope it is also worth noting that the future chairman, Mr. Vayas Valdivieso (to be appointed in INC-4) specifically states during INC-3 that, 'the committee shouldered a significant responsibility, not to eliminate all plastics, but rather to end plastic pollution'.²⁹ This perspective could be seen to be in keeping with UN Resolution 5/14,³⁰ advocating a multiple pathway approach to achieving an ILBI.

At the stage of INC-3, many of the ILBI complications are perceived by some parties as appropriate for inclusion under the realm of scope, while others proffer that scope is an inappropriate classification, and these issues should fall under instruments or objectives. Evidence of these perspectives is provided, yet the question remains, is this truly an issue of semantics? Or do these many and complicated issues represent the core of the thorny challenges that require at least some degree of resolution? Finding common ground among members with diverse interests is necessary for a functional ILBI. Again, a scope that clearly demarks the issues to be dealt with is required.

The specific 'scope' section of INC-3 Annex III Section d states that the 'UNEA resolution 5/14 provides the basis for identifying the scope of the future instrument'. Thus, the realm of scope 'entails the long-term elimination of plastic pollution based on a comprehensive approach addressing the full life cycle of plastics. There also appeared to be a common understanding that all sources of plastic pollution would fall within this scope'.³¹ However, this perspective is not unanimously held and, as the INC-3 scope section identifies, there are three broad views regarding what should or should not qualify for review under scope including 'different interpretations of what the life cycle of plastics encompasses'.³² Even the pollutants are not yet defined, due to a combination of economic interests, scientific uncertainty or regulatory complications, 'with some members indicating that polymers of concern should not be part of what is to be reviewed'.³³

²⁸ *Ibid.* para 38.

²⁹ *Ibid.* para 140.

³⁰ *Supra.* n.17 UNEP/EA.5/Res.14.

³¹ *Supra* n.28 INC-3 Report Annex III Section d. para 18.

³² *Ibid.* INC-3 Report Annex III Section d. para 20.

³³ *Ibid.* INC-3 Report Annex II Section 11.

Interpretation of the three broad perspectives reveals the range of interests among committee participants;

- (a) ‘no specific scope provision being included in the instrument;
- (b) a short scope provision essentially reflecting the language contained in UNEA resolution 5/14; or
- (c) a detailed scope provision addressing additional aspects, including with respect to what exactly might be covered as part of the “full life cycle” of plastics, including in terms of material, geographical and/or jurisdictional coverage.’³⁴

INC-3 clearly identifies that there is a dispute over what is essentially ‘the scope of the scope’. Further potential scope options are revealed by the RZD, issued prior to INC-4, where more potentially thorny issues are revealed by the four broad groups that submitted their post Zero Draft and INC-3 input. The four broad groups consist of the HAC, the LMG, the Business Coalition for a Global Plastics Treaty (led by the Ellen MacArthur Foundation, and the Worldwide Fund for Nature, and including 150+ business organisations, NGOs and financial institutions), and the additional group, Scientists Coalition for an Effective Plastic Treaty, who seek to offer neutral scientific perspectives. The combined opinions in the RZD reveal different layers of potential scope complexities.

The RZD includes additional issues, but these issues are purposefully bracketed within the text to imply that they remain unresolved issues that have been identified by some members. As such, they are potential subjects for further discussion and resolution by the committee members, rather than obligatory solutions imposed by the RZD. An example is fishing gear: should it be classified as a standard plastic waste or as a separate category? It has been classified under other instruments, e.g., MARPOL Annex V,³⁵ but will approaching the plastics involved with an emphasis on circularity from a scientific perspective contribute to existing legislation? Or, as other interests argue, should it not be specifically mentioned in the ILBI?³⁶

³⁴ *Ibid.* INC-3 Report Annex III Section d. para 19.

³⁵ MARPOL Annex V RESOLUTION MEPC.295(71)(adopted on 7 July 2017) 2017 GUIDELINES FOR THE IMPLEMENTATION OF MARPOL ANNEX V available [https://www.wcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MEPCDocuments/MEPC.295\(71\).pdf](https://www.wcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MEPCDocuments/MEPC.295(71).pdf) accessed 28 march 2025.

³⁶ *Supra* n.28 INC-3 Report para 47 & 51.

This leads to the broader issue of circularity, which, although mentioned as a necessary consideration for plastics management, still lacks a defined starting and ending point with regard to the lifecycle.³⁷ Again a complex issue that requires a focused scope as marine pollution is a recurrent theme for the ILBI.

E. The scope as per INC-4 Ottawa, 23–29 April 2024

The stakeholders within INC-4 had time to review the RZD, compiled following the shared feedback of INC-1, INC-2 and INC-3. Therefore, the suggested changes regarding the scope domains are strongly apparent in INC-4. This is particularly noticeable through the contrasting perspectives of the two main groups, the HAC and the LMG, whose differing interests and corresponding opinions, become clearly apparent in INC-4. These opinions are explored here. However, as shown through an analysis of INCs 1 to 3, it is important to keep in mind that it would be an oversimplification to perceive the issue of source boundary perspectives as a simple binary polarisation between HAC members, who focus more on upstream measures and LMG members who prioritise downstream plastics management.

Stakeholders such as business and science coalition members also have differing perspectives and interests. As explained in the INC-2 source section, finances are a strong influencing factor. Some Global-South nations are clearly concerned about the lack of suitable financial means to engage with elevated plastic pollution management, and they do not want to be disadvantaged by prospective binding penalties that would require managing plastics beyond their predetermined, current capabilities. Thus, an added dimension of potentially shared interests arises, where the incumbent plastic producers favour a more relaxed source definition, and those most immediately disadvantaged by plastic pollution are also wary of a stricter source definition, that could lead to their disadvantage, at least in the short-term.

During INC-4, a strong focus emerges, driven by varied interests, on the prospective principles of free trade (unbiased economies) and the polluter pays principle, which apply at the two

³⁷ J. Vince, B. Carney, A. N. de Miranda Grilli, V. Dwivedi, A. Stöfen-O'Brien & J. Beyer, "The Zero Draft Plastics Treaty: Gaps and challenges" (2024) Cambridge Prisms: Plastics, Cambridge University Press, Vol. 24, 1–10, [hereinafter: The Zero Draft Plastics Treaty] available <https://www.cambridge.org/core/journals/cambridge-prisms-plastics/article/zero-draft-plastics-treaty-gaps-and-challenges/CBD5124237F57963B5AF66E972538A4A> accessed 24 February 2025.

extremes of plastic pollution: upstream producers and those most immediately affected by downstream pollution, who, in the short to mid-term, require financial assistance to manage plastic waste. This opens up areas of common ground where, once finances are made available, compromises can be more willingly made by those nations who may, theoretically, be misperceived as having the strongest interests in being the most steadfast adherents of a comprehensive, source- to- end- use approach to plastic pollution remedies.

It is helpful first to provide a summary of the HAC perspective, which succinctly clarifies in paragraph 43 their perspective regarding issues pertinent to scope that have been analysed. These include the use of the precautionary approach which prioritises productive action based on available means, and the reaffirmation of the ‘the human right to a clean, healthy and sustainable environment’. This involves action across the entire plastics life cycle, with an emphasis on the ‘importance of existing scientific evidence’ to identify the effects of plastic pollution and the application of ‘common legally binding global rules and control measures’ supported by,

‘the best available science ... to limit the consumption and production of primary plastic polymers to sustainable levels; eliminate or restrict unnecessary, avoidable and problematic plastic products, plastic polymers and chemicals of concern; establish global criteria or requirements for products, including for durability, reuse, repair and recycling; ensure a safe circular economy for plastics that protected the environment and human health.’³⁸

It emphasised the acknowledgement of ‘binding measures and provisions on transparency, labelling, monitoring and reporting across the full life cycle of plastics, including on the type and quantities of polymers and the composition of plastic materials and products, including chemicals, as well as labelling across plastics value chains to ensure accountability’. It is of relevance to note that the HAC also emphasise means-adjusted financing to facilitate action, ‘highlighting the need to mobilise the necessary resources from all sources, including public and private, domestic and international ... the coalition’s members stood ready to discuss the most appropriate mechanisms for ensuring timely, accessible, recurrent, predictable and adequate financing for implementation’. There is an interesting closing comment to this

³⁸ INC-4 was held in Ottawa, Canada, from 23 to 29 April 2024 UNEP/PP/INC.4/5 [hereinafter INC-4 Report] available https://wedocs.unep.org/bitstream/handle/20.500.11822/45872/INC4_Report.pdf accessed 25 February 2025 para 43.

comprehensive list by the HAC group, ‘the elimination of harmful incentives that worked against the goal of ending plastic pollution’.³⁹ How this is to be interpreted is unclear, however it may be indicative of the HAC representative’s sentiment that there are purposefully divisive efforts against achievement of the ILBI.

An analysis of the LMG representative’s summary in paragraph 44 reveals a different emphasis of potential scope. The statement ‘in line with the mandate of UNEA resolution 5/14, the draft text should be refined into a concise and actionable document, by way of effective negotiations based on common but differentiated responsibilities and sustainable development.’ sets the tone. A ‘concise and actionable document’ may seem like a reasonable and pragmatic request. However, in light of the complex mix of emerging and unresolved issues regarding potential scope emerging from the INCs so far, the question arises as to how a concise document can be reconcilable with the need for solutions to the wide range of potential scope issues. Is ‘concise’ compatible with ‘comprehensive’, and if ‘actionable’ means fulfillable, then middle ground allowing consensus and action would be assisted by an established and agreed scope.⁴⁰ The LMG representative states, ‘[d]eveloped countries should take the lead in addressing plastic pollution, supporting developing countries through financial and technological assistance and technology transfer on mutually agreed terms, and any policy framework must acknowledge national circumstances’. This appears in keeping with the similar statement from the HAC representative to supply ‘adequate financing for implementation’. Finances are being potentially offered from both sides. In the INC arena where a voting majority consists of two thirds of registered states, states with financial concerns over waste management are not being alienated by either side. Similarly, ‘principles of transition to sustainable practices and equitable waste management solutions’ are affirmed by the LMG representative.

The LMG representative states that ‘complementarity was also key in negotiating the future instrument, while avoiding duplication and leveraging existing international frameworks.’ Again, this may be a practical suggestion in favour of a concise approach. On the other hand, it can be a way of passing the baton. It might prove convenient for some of the complex issues already identified for consideration in respect of the ILBI to rest within the domain of

³⁹ *Ibid.* para 43.

⁴⁰ *Supra* n.39 INC-4 Report para 44.

legislation already in existence prior to ILBI. Here ‘complementarity’ and avoiding ‘duplication’ can be efficient and convenient, but it can also risk a diminishment of a comprehensive ILBI.

Other HAC scope-related issues detail specific identification of plastics, chemicals, and labelling for a safe circular economy. Calls for action across the entire plastics life cycle are clearly not a stated focus of the LMG during INC-4. There appears to be a disparity between this lack of attention to such detail and the LMG representative’s statement that, ‘[d]espite the need for expediency, the quality and substance of the agreement must not be compromised during negotiations’.⁴¹

The representative of the ‘Gulf Cooperation Council’ who are affiliated with the LMG, states, ‘Consensus should be built through a mutual understanding of diverging opinions, with a view to establishing more economically and environmentally sustainable practices, while recognising the economic realities and national capacities of all countries. In that regard, developing countries should not be subject to any additional financial burden’.

It is also stated that, ‘the prioritisation of alternative economies and waste management systems, and knowledge should be shared, particularly expertise on the banning of plastics’. Resolution 5/14 (as identified in an analysis of the previous INCs’ ‘mixed path approach’) is mentioned twice by the Gulf Cooperation Council, with the closing statement advising that, ‘[t]he efforts of all Member States should converge around a legally binding instrument, which should adhere to the provisions set out in resolution 5/14’, once again in keeping with the affirmation of ‘a mutual understanding of diverging opinions’ that recognises ‘economic realities’.⁴²

In the three successive paragraphs, all three groups are affirming financial support for means assessed countries. However, only the HAC is specifically mentioning a limitation of upstream primary plastics, and reduction in plastic consumption, whereas the other two groups are more focused on the management of downstream plastics. This imbalance is observed later in INC-

⁴¹ *Ibid.* para 44.

⁴² *Supra* n.39 INC-4 Report para 45.

4 when, ‘One representative, speaking on behalf of a group of countries’ indicates a lack of attention being paid to the scope of plastic production and suggests greater consideration for,

‘technical aspects related to all options for primary plastic polymers. Her proposal was subsequently supported by a large number of representatives, including two speaking on behalf of groups of countries. A number of those who spoke in support of the proposal stressed the importance of tackling the topic of production, with several recalling that the committee’s mandate, as expressed in Environment Assembly Resolution 5/14, was to address the full life cycle of plastics.’⁴³

The development of scope in INC-4 towards the specific chemical nature of plastics and how they might be dealt with according to those criteria, is evident in Paragraph 84, which also includes a call for development of ‘initial lists’ pertaining to,

‘criteria for the identification and listing of problematic and avoidable plastic products; criteria for exemptions applicable to chemicals and polymers of concern, problematic and avoidable plastics and sector-specific applications currently covered under the proposed provisions on scope; product design and performance, including criteria and approaches to promote circularity; transparency, tracking, monitoring and enabling particularly the tracking of chemicals used in the production of plastics, and approaches and minimum requirements for information disclosure; and the definition of key terms. Many representatives expressed support for the various elements proposed, particularly those addressing chemicals and polymers of concern, problematic and avoidable plastic products and product design.’⁴⁴

These calls for changes to potential scope reveal a desire by country groups to revise in INC-4 what were seen as shortcomings of the RZD. An observation supported by other assessors,

‘the substantive obligations of the text relating to obligations and rights in relation to managing the life cycle of plastics was coined by, at times, extreme disagreement among members. The inclusion of achieving sustainable consumption and production for primary plastic polymers

⁴³ *Ibid.* para 82.

⁴⁴ *Supra* n.39 INC-4 Report para 84.

and the elimination of certain polymers, chemicals, and products of concern was one of the key aspects discussed in the session and it needs to be addressed in the future'.⁴⁵

F. The Scope as per Chair's Text (01 December 2024): A summary of scopes

In the entire Chair's Text,⁴⁶ which is the most recent official feedback from the ILBI chairman at INC-5 (now INC5-1 in anticipation of additional INC meetings), the word 'scope' does not appear even once. The multiple issues concerning the evolving catchment areas of scope in all the INCs so far have not all been resolved. The concept of scope as a category is neither refined nor even settled. The question arises whether the unresolved issues have been reassigned to objectives and instruments? If the issue of the catchment area of scope has been resolved, then it ought to be mentioned in the Chair's Text. To be fair, the Chair's Text follows a similar approach to the Zero Draft and RZD. It serves as a summary of issues for further consideration by the committee, rather than the imposition of a fixed ILBI upon the committee members. Although a scope category is not defined, the Chair's Text does recognise many of the issues potentially applicable to the range of scope in the previous INCs. These issues are identified as follows.

Article 1, Objective, 'The objective of this Convention is to protect human health and the environment from plastic pollution, including in the marine environment [based on a comprehensive approach that address the full life cycle of plastics].' It is significant that [based on a comprehensive approach that addresses the full life cycle of plastics]⁴⁷ it is bracketed in the same manner as the other unfixed and debatable propositions identified for further committee discussion in the previous Zero Draft and RZD. So, the 'objective' appears to indicate that taking a resolute upstream and downstream full life cycle plastics approach is not yet a certainty, even though it was portrayed clearly as such from the outset in INC1 and INC2.

Many principles are mentioned in the Option 1 section of the Chair's Text. These include the principle of sovereignty of States, the Charter of the UN, and the principles of international law

⁴⁵ *Supra* n.38 The Zero Draft Plastics Treaty p.8.

⁴⁶ INC Chair's Text, 1 December 2024 UNEP/PP/INC.4/5 [Hereinafter Chair's Text] available: https://wedocs.unep.org/bitstream/handle/20.500.11822/46710/Chairs_Text.pdf accessed 25 February 2025.

⁴⁷ *Ibid.* Article 1.

(such as the Rio Declaration on Environment and Development).⁴⁸ These diverse concepts are grouped together in the Chair's Text including, inter alia, the sovereign right of states to exploit their own resources pursuant to their own environmental and developmental policies, the acknowledgement of the benefit of present and future generations of humankind, and the principle of sovereignty of States in international cooperation to address the issue of plastics pollution. Also included are the concepts of just and equitable transitions recognising the diverse pathways needed to address plastic pollution, and the precautionary approach.⁴⁹

The Chair's Text lists this considerable range of notions as affiliated with the INCs. It does not offer or acknowledge the potential incompatibility of many of these principles when it comes to the creation of an ILBI. For example, the sovereign right of states - with incumbent interests in the plastics industry - to exploit their own resources, might come into conflict with the environmental principle of intergenerational rights. A degree of cohesion and maybe even prioritisation is needed in the ILBI. A clearly defined scope would certainly be beneficial for such clarification.

The Chair's Text does contain considerable detail about plastics, including efforts to initiate a list of prohibited plastics, according to their frequency of use, danger to the environment, social necessity, and human health. The Chair's Text also specifies using a Review Committee and expert panel, including scientists to work on developing these lists.⁵⁰ The composition of these lists has been debated amongst committee members with differing agendas.⁵¹ Again, measures for dealing with some of the more complex issues such as microplastics are very loose and are not specified, being either in brackets or accompanied by clauses such as, '[e]ach Party shall take measures to prevent, reduce, and, where possible, eliminate.'⁵² The terminology 'take measures' and 'where possible' is far from assertive.

⁴⁸ Rio Declaration on Environment and Development (1992) available https://www.iau-hesd.net/sites/default/files/documents/rio_e.pdf accessed 29 March 2025.

⁴⁹ *Supra* n.47 Chair's Text p 2,3.

⁵⁰ *Ibid.* p 5,6,7.

⁵¹ Maastricht University, "Better No Treaty Than a Weak One – A Summary of INC-5" (17 December 2024) available <https://www.maastrichtuniversity.nl/blog/2024/12/better-no-treaty-weak-one-%E2%80%93-summary-inc-5> accessed on 25 February 2025.

⁵² *Supra* n.47 Chair's Text p10.

Many provisions dealing with the actual practical management of plastics are very open. ‘Each Party shall take measures to ensure that plastic waste is managed in an environmentally sound manner, taking into account relevant guidelines developed under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal and other relevant agreements and organizations’.⁵³ This author suggests that a final ILBI would benefit from a clear and well-defined scope in the manner with which the Basel Convention opens. As investigated here, the scope varies according to each of the INCs. In the Chair’s Draft after INC-5 the scope is not even mentioned and yet the scope issues are unresolved. In INC-1 a circular complete plastics lifecycle approach is advocated, support for these ebbs and flows throughout the INCs with no conclusive determination in favour of upstream and downstream plastics’ pollution management. Other significant scope-related issues include lack of agreement on the specific types of pollutants for the ILBI to prioritise, and on the type of financing mechanisms to be applied. A scope for the ILBI requires determination on an international scale through the consideration of scientific evidence, and a long-term economic perspective determined through the lens of environmental costs and precautionary, intergenerational and transparency principles.

Scope issues identified in the INCs, such as capacity building, providing scientific and technical support to developing countries whilst integrating indigenous knowledge, are clearly included in the Chair’s Text.⁵⁴

Analysis of all the INCs has identified the recurrent issue of finances and how these can be used to achieve the agendas of incumbent interests, rather than the ultimate reduction of plastic pollution. A major issue raised has been that of competing groups. Finance mechanisms require transparent and unbiased administration, otherwise they can be used by certain states to elicit support from other voting members for vested-interest agendas, that can be contrary to a simultaneous upstream and downstream approach to the management of plastic pollution.

⁵³ *Supra* n.47 Chair’s Text Article 8 ‘Plastic Waste Management’ para 1, p 10.

⁵⁴ *Ibid.* p 14.

Article 11 of the Chair's Text seems to support a mechanism of financial aid provision, however much of this is undetermined and remains in square brackets. One approach for a more authoritative scope would be to include an efficient financing mechanism, one that prevents the competing interests from undermining the fundamental purpose of ILBI for the reduction of plastic pollution, through a dual application of upstream and downstream approaches, in keeping with the multi-path solution concept identified in Resolution 5/14.

G. Theoretically appropriate Scopes

At this late stage in the INC proceedings, the scope has become less holistic and increasingly fragmented according to contextual influences, rendering the preferred type of viable treaty option hard to discern. The Chair's Text specifically includes the essential option for future amendments through annexes that will allow the ILBI to evolve.⁵⁵ However, a more sufficient blueprint could be provided. Treaties come in many forms and shapes, the degree of appropriateness of the type of treaty chosen varies according to context and priorities. Treaty options are multiple, and some are categorised for convenience by Michael Bowman whose insight may provide constructive guidance, based on precedent, for the dilemma currently faced by disparate interests forming the INC committee for the ILBI.

‘...the selective personalisation of generally applicable substantive obligations more commonly serves the purpose of rendering the treaty regimes that create them more palatable to individual States, and hence more likely to attract participation and support....there is a price to be paid for this element of flexibility, which is manifest in terms both of the dilution of the overall substantive effectiveness of the treaty in question and also of the increased technical complexity of the juridical inter-relationships amongst the parties that may result from recourse to the various mechanisms through which this differentiation of obligations may be generated..’⁵⁶

⁵⁵ *Supra* n.47 Chair's Text Article 24 Adoption and Amendment of Annexes p 21.

⁵⁶ Michael J. Bowman and Dino Kritsiotis 'Conceptual and Contextual Perspectives on the Modern Law of Treaties' (2018) Cambridge University Press p 437.

This complexity can be reduced ... through the selection by treaty drafters of the optimum method of generating the flexibility desired. In general, the deployment of ‘opt-in’ arrangements may generate fewer technical problems than devices that permit opting-out.⁵⁷

Some interesting and established treaty options can provide lenses of perspective for future developments and their accompanying scope. The option of “Partial Acceptance and ‘Modular’ Treaties” could be a viable option compatible with the current INC/ ILBI situation. Structuring the treaty into pre-agreed and defined modules, with combinations accepted as viable by all members, can subsequently achieve tailored mutual agreements. The challenge to this approach is in selecting module combinations that are workable and that do not undermine the fundamental tenets of the treaty. In addition, a system of continuous monitoring is required. Ultimately enabling the treaty to evolve to a state of maximum compliance with the broadest range of treaty goals. Although an uncommon treaty type, it is acknowledged in the Vienna Convention.⁵⁸

Another potential candidate is “The ‘Smorgasbord’ Approach” where members choose a specified minimum number of treaty obligations but ideally increase their selections over time. This choice is merely listed as an option of which to be aware, as it is more haphazard and risks, ‘where such selectivity could not easily be permitted without causing the entire system to collapse’.⁵⁹ There are a variety of additional potential options, yet the context of the ILBI for plastics has particular contextual pressures, including time limits for environmental targets, and the variance of priorities between the multiple principles adhered to. It is often advocated, from a soft law perspective on treaties that ‘the disadvantages generated by the differentiation of legal obligations have generally been considered a price worth paying if increased participation is the result.’⁶⁰ However, is this the case if the purpose of the ILBI in addressing global plastic pollution is undermined in order to include a majority of uncommitted adherents?

⁵⁷ *Ibid.*

⁵⁸ Michael J. Bowman and Dino Kritsiotis ‘Conceptual and Contextual Perspectives on the Modern Law of Treaties’ (2018) Cambridge University Press p 423.

⁵⁹ Michael J. Bowman and Dino Kritsiotis ‘Conceptual and Contextual Perspectives on the Modern Law of Treaties’ (2018) Cambridge University Press p 429.

⁶⁰ Michael J. Bowman and Dino Kritsiotis ‘Conceptual and Contextual Perspectives on the Modern Law of Treaties’ (2018) Cambridge University Press p 437-438.

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Chapter 4

Principles

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Introduction

Environmental law principles, which are also considered general principles of international law, can function as a mechanism to resolve certain legal issues by establishing connections between diverse types of legal obligations.¹

These principles have several functions under international law, such as contributing to the development of further legal norms, as well as their implementation, and enjoy a degree of influence over policymaking. These principles are essential for the further implementation and effectiveness of the ILBI in line with the Rio Declaration, having regard to principles such as the polluter pays principle and the principle of common but differentiated responsibility, which require further attention in the ILBI.

However, not all environmental law principles are widely recognised under international law, thereby presenting possible challenges in their application.² It is therefore essential for the ILBI to address the important principles that may affect efforts to mitigate plastic pollution. It should be noted that all of the principles evaluated in this study are highly interconnected and should be implemented to ensure a more robust legal framework.

¹ Teresa Fajardo, “Environmental Law Principles and General Principles of International Law,” in *Principles of Environmental Law*, (Ludwig Kramer & Emanuela Orlando ed. Edward Elgar publishing, 2018), at p.39.

² Qi Xu, Mingyang Zhang & Shuli Han, “Reflections on the European Union’s Participation in Negotiations of the Global Plastic Pollution Instrument under International Environmental Law,” *Policy and Practice Reviews*, (2024), at p. 4.

A. Key Issues

Key international environmental principles and their application under the ILBI should be addressed to ensure recognition of these principles in transition. The fundamental aspects of principles can be delineated to include their scope of application, recognition, definition, legal status, efficacy, and associated factors.

B. Recommendations

The main principles are listed under Chapter 1, Art. 4, of the RZD as:

“common but differentiated responsibilities, the polluter pays principle, the precautionary approach, the prevention principle, respect for sovereignty over the use of natural resources, just transition, the protection of vulnerable communities, shared responsibility, intergenerational equity, non-regression, ecosystems approach, EPR, transparency, inclusiveness, bottom-up approach, a gender perspective, general principles relating to marine pollution, circular economy, non-discrimination, best available science, local and Indigenous knowledge, access to information and transparency, equity, sustainable development, measures taken to address plastic pollution should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade or cooperation at regional and international level, the principle of sovereignty of States, the right to choose policy mixes, avoidance of creating new development and environmental problems.”

C. Relevant Principles

To facilitate the effective implementation of the ILBI, several recommendations will be proposed, considering the specific principles mentioned in the RZD.³

1. **Sovereignty over Natural Resources** : The right of states to exploit, regulate, and dispose of natural resources is associated with the principle of sovereignty under international law.⁴ This right has been limited by certain international norms such as

³ UNEP Doc No. UNEP/PP/INC.3/4, 4 September 2023, “Zero draft text of the international legally binding instrument on plastic pollution, including in the marine environment” [hereinafter Zero Draft].

⁴ Marco Gestri, “Sovereignty of States over their Natural Resources,” in *Principles of Environmental Law*, (Ludwig Kramer & Emanuela Orlando ed. Edward Elgar publishing, 2018), at pp.79-80; UN Conference on the Human Environment, UN Doc. A/RES/2994, (Dec. 15, 1972) Principle 2 [hereinafter: Stockholm Declaration].

the sustainable use of natural resources and the transboundary harm principle.⁵ Sustainable use of natural resources is seen as an emerging norm related to the principles of sustainable development and intergenerational equity.⁶ This principle is regulated under the Rio Declaration where “States have, in accordance with the Charter of the UN and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.”⁷ The text indicates that states should utilise their natural resources in a manner that does not cause transboundary harm to other states. Thus, states should also act with due diligence in order not to cause any transboundary harm, pertaining to potential plastics-derived pollution within their territories. This principle is linked to some degree with the transboundary harm principle, which will be evaluated in following sections.

2. **Sustainable Development:** Since the 1960s certain global goals have been adopted by the UN.⁸ In 2015, 17 SDGs were adopted, many of which address concerns over global climate change.⁹ The primary characteristic of these goals is that they are predominantly non-binding, political, time-bound, and quantitative.¹⁰ Some of these goals can be seen as particularly relevant to plastic production such as responsible consumption and production, innovation and infrastructure or climate change.¹¹ Their non-binding nature, however, does not affect their importance; it is stated that these goals actually aim to address certain commitments under binding international treaties.¹² There are already numerous international treaties mentioned in relation to the

⁵ Gestri, 2018, *supra* n.6, at pp. 80-81.

⁶ *Ibid.*, at p. 88; International Law Association (ILA), New Delhi Declaration of Principles of International Law: the sustainable development (April 2002).

⁷ *Rio Declaration on Environment and Development, in the Report of the UN Conference on Environment and Development*; UN Doc. A/CONF.151/26 (Aug. 12, 1992), principle 2. [hereinafter: Rio Declaration].

⁸ Louis J. Kotze, “The SDGs: an Existential Critique Alongside Three New-Millennial Analytical Paradigms,” in *SDGs: Law, Theory, and Implementation*, (Duncan French & Louis J. Kotze ed. Edward Elgar Publishing, 2018), at p. 41.

⁹ Transforming our world: the 2030 Agenda for Sustainable Development, UNGA Res. A/RES/70/1, (Oct. 21, 2015).

¹⁰ Kotze, 2018, *supra* n. 10, at p. 41.

¹¹ See in general. <https://sdgs.un.org/goals> (29.03.25).

¹² *Ibid.* at p. 45.

SDGs, such as the UNFCCC.¹³ Due to the legal status of such instruments, it is highlighted that the application of the SDGs is informed by norms under international treaties and principles.¹⁴ They are also considered important for building a link between the environment and development.¹⁵ Applying this principle to the ILBI from the outset, will facilitate the establishment of a connection between economic concerns on plastic production and environmental protection. The sustainable development principle integrates distinct pillars: environmental, social, and economic.¹⁶ All of these pillars should be considered under the same principle while determining the scope of application. Indeed, under this principle, international development should be based on an interactive approach among the three pillars.¹⁷ This principle is also linked with the ecosystem approach, which will be evaluated below.

3. **Polluter Pays:** The polluter pays principle is regulated under numerous environmental law instruments, such as the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention)¹⁸ and the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter.¹⁹ During INC negotiations, state parties, and particularly the EU, advocated for this principle.²⁰ Considering the impacts of plastic pollution,²¹ this principle is essential for the prospects of achieving legal compliance and mitigating hazardous outcomes in plastic waste management practices that are not conducted with due diligence.²² Indeed, this principle is essential for building a fair and effective liability system under the

¹³ UN Framework Convention on Climate Change, UN Doc.A/RES/48/189, (Jan. 20, 1994), preamble, [hereinafter: UNFCCC].

¹⁴ Niamh Guiry, “International Law & The SDGs,” 7 The Boolean (2024), at p. 2.

¹⁵ Warner Scholts & Michelle Barnard, “The Environment and the SDGs: We are on a Road to Nowhere.” in *SDGs: Law, Theory, and Implementation*, (Duncan French & Louis J. Kotze ed. Edward Elgar Publishing, 2018), at p. 223.

¹⁶ *Ibid.* at p. 224.

¹⁷ *Ibid.* at p. 229.

¹⁸ Convention for the protection of the marine environment of the North-East Atlantic, 2354 UNTS 67, (Jan. 3, 2006), Art.2/b.

¹⁹ 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, (Amended in 2006), Art. 3/2. <https://www.wco.imo.org/localresources/en/OurWork/Environment/Documents/PROTOCOLAmended2006.pdf> (accessed. 17.02.25).

²⁰ EU, *Recommendation on the Council Decision Authorising the Opening of Negotiations on Behalf of the European Union for an International Agreement on Plastic Pollution*, Doc. 52022PC0342, (July 12, 2022).

²¹ See in general, International Union for Conservation of Nature (IUCN), “Plastic Pollution” Issues Brief (May 2024).

²² Xu & Han, 2024, *supra* n.4, at p. 5.

ILBI. For the effective implementation of this principle, it is proposed that all resources from the public and private sectors be considered for mobilisation, and all parties should establish additional financial resources to ensure compliance with the ILBI.²³ The RZD stipulates additional financial measures for developed countries and imposes further obligations under the polluter pays principle. Specifically, the ILBI should direct that developed nations provide assistance to developing countries in transition to cover the full costs of implemented measures.²⁴ As in the context of climate change transition, when applying the polluter pays principle to just transition under the ILBI, it is crucial also to implement measures to mitigate future damages while states fulfil their obligations for past pollution.²⁵ Otherwise, it is argued that the future costs are simply directed to future generations.²⁶ This notion is recognized as a principle in its own right, the principle of intergenerational responsibility, which will be examined below. One proposed solution for addressing this issue is to establish a taxation system to fund future measures for damage mitigation.²⁷

4. **Precaution:** The precautionary principle is defined in the Rio Declaration in the following terms: ‘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.’²⁸ This principle has become a significant environmental principle over the years, particularly within European Union law.²⁹ The precautionary principle is recognised as a deliberative framework whose application entails consideration of specific normative dimensions.³⁰ Application of the precautionary principle should not be interpreted as imposing strict environmental standards; rather, the principle addresses the issue of states attempting to implement

²³ *Ibid.*, at p. 11.

²⁴ *Ibid.* Zero Draft, Chapter 5, Art. 1/4.

²⁵ Fausto Corvino, “The Forward-Looking Polluter Pays Principle for a Just Climate Transition,” *Critical Review of International Social and Political Philosophy* (2023), at p. 11.

²⁶ *Id.*

²⁷ *Ibid.*

²⁸ Rio Declaration, Princ.15.

²⁹ EU, *Consolidated Versions of the Treaty on the Functioning of the European Union*, Official Journal C 326, (Oct. 26, 2012), Art.191.

³⁰ Rene von Schomberg, “The Precautionary Principle and its Normative Challenges,” in *Implementing the Precautionary Principle: Perspectives and Prospects*, (Elizabeth Fisher, Judith Jones & Rene von Schomberg ed. Edward Elgar Publishing, 2006), at p. 19.

their chosen protection measures in situations of scientific uncertainty.³¹ Due to its inherent complexity, application of the precautionary principle in diverse domains may necessitate varying outcomes, which requires further substantiation.³² This principle holds significant environmental importance across various domains, including waste management.³³ To effectively mitigate the adverse effects of plastic waste management, it is essential for companies and governments to conduct necessary assessments to ensure that their plastic materials will not cause significant harm, and this may restrict the use of certain plastic types, such as those that can result in microplastics.³⁴ Even though there are no clear studies on how to apply the precautionary principle to plastic production, key elements in the application of the precautionary principle to the risks arising from plastic-related activities can be identified by having regard to climate change as a case study:

- i. multidisciplinary uncertainty analysis,
- ii. determining potential future impacts by conducting research on historical patterns or evidence,
- iii. considering even improbable future events that may lead to potential scenarios,
- iv. enhancing monitoring mechanisms and conducting empirical research, and
- v. increasing resilience, *etc.*³⁵

It is also stated that to monitor this, a technical committee under the INC can be authorised.³⁶

5. **Common but Differentiated Responsibility:** The RZD emphasises in multiple articles that states should be responsible for plastic pollution mitigation having regard to their respective capabilities. This principle, was initially defined in the Rio Declaration in

³¹ *Ibid.* at p. 24.

³² *Ibid.* at p. 25.

³³ *Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on Waste and Repealing Certain Directives*, Official Journal of the European Union, (Nov. 19, 2008).

³⁴ Xu & Han, 2024, *supra* n.4, at p. 10; *Commission Staff Working Document, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A European Strategy for Plastics in a Circular Economy*, Doc. 52018SC0016, (Jan. 16, 2018), at p. 81.

³⁵ For more information see. Jeroen van der Sluijs & Wim Turkenburg, "Climate Change and the Precautionary Principle," in *Implementing the Precautionary Principle: Perspectives and Prospects*, (Elizabeth Fisher, Judith Jones & Rene von Schomberg ed. Edward Elgar Publishing, 2006), at pp.260-265.

³⁶ Xu & Han, 2024, *supra* n.4, at p. 10.

the following terms: ‘developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command’.³⁷ This principle is subsequently found in other relevant international treaties.³⁸ Although the status of this principle is predominantly considered soft law,³⁹ as can be inferred from the Rio Declaration, it is essential in reconciling the responsibilities of developing and developed states.⁴⁰ This principle may help to mitigate the unequal consequences of plastic pollution and establish equitable mechanisms for managing plastic waste.⁴¹ Additionally, it may push certain developed countries to shoulder additional responsibilities such as funding the transition, preventing illegal dumping, etc.⁴² Indeed, developed countries, with their greater financial resources and industrial capacity make a significant contribution to plastic waste.⁴³ However, this principle is sometimes regarded as ineffective in the context of the ILBI, mostly due to the reluctance of states in the discussions.⁴⁴ It is also important to note that allocating responsibility throughout the plastics lifecycle and supply chain may present significant challenges.⁴⁵ Instead, some states regard the polluter pays principle as a primary principle of application in the allocation of responsibility.⁴⁶ Nevertheless, it is imperative to note that the ILBI should incorporate specific financial mechanisms that facilitate capacity building, ensure equitable burden sharing, and promote meaningful participation of developing nations.⁴⁷

³⁷ Rio Declaration, Princ.7.

³⁸ Paris Agreement, 3156 UNTS 79, (Dec. 12, 2015), Art.2 [hereinafter: Paris Agreement]; UNFCCC, Art.3; Kyoto Protocol to the UN Framework Convention on Climate Change, Doc. FCCC/CP/1997/L.7/Add.1, (Dec. 10, 1997).

³⁹ For more information, see. Philippe Cullet, “Common but Differentiated Responsibilities” in *Research Handbook on International Environmental Law*, (2nd ed. 2021, Malgosia Fitzmaurice, Marcel Brus, Panos Merkouris & Agnes Rydberg ed. SOAS Printed version), at p. 14.

⁴⁰ Xu & Han, 2024, *supra* n.4, at p. 10.

⁴¹ Peter Dauver, “The Necessity of Justice for a Fair, Legitimate, and Effective Treaty on Plastic Pollution,” 155 *Marine Policy* (2023), at p.5.

⁴² *Ibid.*

⁴³ Xu & Han, 2024, *supra* n.4, at p. 10.

⁴⁴ Aleke Stöfen-O’Brien, “The Second Session of the INC to Develop an International Legally Binding Instrument on Plastic Pollution, Including the Marine Environment” 38 *The International Journal of Marine and Coastal Law* 821, (2021), at p. 823.

⁴⁵ Xu & Han, 2024, *supra* n.4, at p. 10; Dauver, 2023, *supra* n. 43, at p.5.

⁴⁶ Xu & Han, 2024, *supra* n.4, at p. 10.

⁴⁷ Dauver, 2023, *supra* n. 43, at p.6.

6. **Transboundary Harm:** Although there is no specific reference in the RZD to the principle of transboundary harm, it can be argued that when discussing plastic pollution and waste management, it is essential to consider this principle. The concept of transboundary harm was established by the International Joint Commission, (a bilateral tribunal that oversees issues arising between the United States of America and Canada) in its decision in the *Trail Smelter* Arbitration.⁴⁸ The scope of this principle is limited to significant transboundary harms with physical consequences.⁴⁹ For damage to be considered under this principle, it must be both ‘serious’ and ‘substantial’.⁵⁰ Based on the Draft Articles published by the International Law Commission (ILC), four main criteria have been specified for the transboundary harm principle: ‘(1) the activity in question must be human activity; (2) it must be within the territory or control of a state; (3) it must give rise to or be capable of giving rise to harm; and (4) that harm must be to persons or things within the territory or control of another state.’⁵¹ Considering the extensive implications of plastic pollution, transboundary damages may incur international liability for states if such damages are deemed 'serious' and 'substantial.' In this context, this principle can serve to encourage states to take further precautions, having regard to the requirements of due diligence, regarding the transboundary effects of their activities on plastic production and dumping.
7. **Intergenerational Equity:** With growing concern regarding the future effects of environmental degradation, the principle of intergenerational equity gains importance. Given that the majority of environmental damage persists over time and extends beyond the lifespan of the current generation, the consideration of future generations has become an integral component of environmental law.⁵² Although this principle is mentioned in several treaties⁵³ or soft law instruments,⁵⁴ its status seems symbolic and

⁴⁸ Trail smelter case (United States, Canada), 3 UN Reports on International Arbitral Awards 1905, (March 11, 1941), at p.1980.

⁴⁹ ILC, *Draft articles on Prevention of Transboundary Harm from Hazardous Activities*, Official Records of the General Assembly, 58th. The session, Supplement no. 10(A/56/10) (2005), Art.1.

⁵⁰ *Commentaries on Draft articles on Prevention of Transboundary Harm from Hazardous Activities, with commentaries*, ILC Rep. A/56/10 (2001), at p.151, paras. 16-17.

⁵¹ Daniel Barstow Magraw, “Transboundary Harm: The International Law Commission’s Study on International Liability,” 80 American Journal of International Law 305, (1986), at p.310.

⁵² Isabelle Michallet, “Equity and the Interest of Future Generation,” in *Principles of Environmental Law*, (Ludwig Kramer & Emanuela Orlando ed. Edward Elgar publishing, 2018), at p.151.

⁵³ International Convention for the Regulation of Whaling, 161 UNTS 72, (Nov.10, 1948), Preamble.

⁵⁴ Stockholm Declaration, Princ. 1.

rather complicated.⁵⁵ According to the 2013 Report of the UN Secretary-General, it is ‘a value universally shared by humanity. This value is fundamental to constitutions and international treaties; it is a driving force in the economy and in households, and it manifests itself in religious beliefs, traditions, and culture’.⁵⁶ According to this principle, past, present, and future generations should be considered equally in natural systems.⁵⁷ Given the nature of plastic products, they can persist in the environment for extended periods, potentially causing long-lasting detrimental effects that may impact future generations.⁵⁸ As a result, it is essential to consider the interests of future generations when determining measures for plastic pollution. To achieve this objective, three main strategies must be applied: i. conservation of options: each generation should protect natural and cultural diversity, ii. conservation of quality: each generation should maintain the ecological integrity of the planet, iii. conservation of access: each generation should provide subsequent generations with equitable access to the legacy of preceding generations.⁵⁹ The INC should consider the interests of future generations by emphasising the principle of intergenerational equity within the obligations of states.

8. **Prevention:** While regulating users for plastic pollution, it is essential to consider the prevention principle. The prevention principle was mentioned in the 1972 Stockholm Declaration.⁶⁰ The adoption of this principle marked a shift in international environmental law from remediation to prevention.⁶¹ The core aim of the principle is to anticipate environmental risks.⁶² It is stated that there are two elements of prevention under this principle: i. material scope, which primarily pertains to defining potential risks by determining environmental harm and establishing foreseeability; and ii. temporal scope, which is also described as the *forestalling of an event*. Temporal scope

⁵⁵ Michallet, 2018, *supra* n. 54, at pp.151-152.

⁵⁶ Intergenerational solidarity and the needs of future generations: Report of the Secretary-General, UNGA Res. A/68/322, (Aug. 15, 2013).

⁵⁷ For more information, see. Edith Brown Weiss, *In Fairness to the Future Generations; International Law, Common Patrimony and Intergenerational Equity*, (The UN University, 1989) at pp.17-21.

⁵⁸ “A legacy of plastic: Environmental responsibility for future generations” (March 2024), <https://interreg-baltic.eu/project-posts/lakes-connect/a-legacy-of-plastic-environmental-responsibility-for-future-generations/> (accessed. 19.02.25).

⁵⁹ Michallet, 2018, *supra* n. 54, at pp.153-154; Brown Weiss, 1989, *supra* n. 59, at pp.198-199.

⁶⁰ Report of the UN Conference on the Human Environment, (June 16, 1972), UN Doc. A/CONF.48/14Rev.1, UN Publications (1995), Princ.21.

⁶¹ Leslie Anne Duvic-Paoli, *The Prevention Principle in International Environmental Law*, (Cambridge University Press, 2018), at p. 28.

⁶² *Ibid.* at p. 179.

encompasses the determination of imminence, emergency, and response.⁶³ Risk management based on the prevention principle suggests that risk can be mitigated by determining the risk level for the activity and implementing sufficient measures to mitigate it.⁶⁴ Despite potential uncertainties regarding whether the prevention principle addresses the prevention of harm or risk of harm, it can be stated that, under the due diligence obligation, it is expected that states take necessary measures before harm occurs.⁶⁵ As a matter of fact, there is an important relationship between the prevention principle and due diligence obligation.⁶⁶ In order to effectively implement this principle, it is essential to determine the anticipated risks associated with the plastics lifecycle and establish measures relevant to those risks.

9. **Ecosystem Approach:** The ecosystem approach is considered a tool for achieving sustainable development.⁶⁷ In this sense, this approach is interpreted as a key methodology of the SDGs.⁶⁸ Regarding its interpretation, it is considered a ‘strategy for the integrated management of land, water, and living resources.’⁶⁹ According to this principle, the health of the ecosystem should be prioritised in conjunction with human utilisation of the environment.⁷⁰ The status of the principle under international law is controversial;⁷¹ however, it is widely adopted by international environmental regimes,⁷² including those governing oceans⁷³ and watercourses.⁷⁴ The ecosystem approach aims to integrate legislation pertaining to environmental pollution with laws

⁶³ *Ibid.* at pp. 179-194.

⁶⁴ van der Sluijs & Turkenburg, 2006, *supra* n.37, at p.260.

⁶⁵ Duvic-Paoli, 2018, *supra* n.63, at p. 183.

⁶⁶ *Ibid.* at p. 203; *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment, ICJ Rep. 2010, (April 20), at para.101.

⁶⁷ Vito De Lucia, “Competing Narratives and Complex Genealogies: The Ecosystem Approach in International Environmental Law,” 27 *Journal of Environmental Law* 91, (2015), at p. 109; Moynihan Magsig, “An Ecosystem Approach in International Environmental Law Relevant to Transboundary Freshwater Ecosystems,” 6 *Chinese Journal of Environmental Law* 125, (2022), at p. 127.

⁶⁸ *Ibid.* at p. 110.

⁶⁹ Vito De Lucia, *The Ecosystem Approach in International Environmental Law: Genealogy and Biopolitics*, (Routledge, 2019), at p. 14.

⁷⁰ Lucia, 2015 *supra* n.69, at p.110.

⁷¹ Magsig, 2022, *supra* n.69, at p. 128.

⁷² Lucia, 2019, *supra* n. 71, at pp. 14-15.

⁷³ See, Owen McIntyre, “The Emergence of an ‘Ecosystem Approach’ to the Protection of International Watercourses under International Law,” 13 *Review of European Community & International Environmental Law* (2004), at pp.6-13.

⁷⁴ See, Martin H. Belsky, “Using Legal Principles to Promote the Health of an Ecosystem,” 3 *Tulsa Journal of Comparative and International Law* 183, (1996), at pp.192-197.

concerning living resources while emphasising the interconnectedness of individual components within cross-scale environmental processes and cumulative effects that change the ecosystem.⁷⁵ This approach is essential for the implementation of the rest of the principles listed above. In this sense, the ecosystem approach should be seen as a method for the application of environmental principles in any future ILBI.

Conclusion

Application of environmental law principles to the development of an ILBI on plastic pollution is highly essential. Key principles include sovereignty over natural resources, sustainable development, polluter pays, precautionary approach, common but differentiated responsibility, transboundary harm, intergenerational equity, prevention, and ecosystem approach, which can be listed as the fundamental principle that should be considered for ILBI implementation. Indeed, it is vital to include these principles in order to create a robust legal framework for addressing plastic pollution. While doing so, the ILBI should highlight the interconnectedness of these principles and their potential to resolve legal issues and connect diverse obligations in international law. There are, however, certain legal issues that should be resolved in the process, including their scope, legal status, and practical implementation in the context of plastic pollution, etc. The ILBI should highlight these issues by providing a legal framework for better plastic production.

⁷⁵ Lucia, 2019, *supra* n. 71, at p.16.

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Chapter 5

Sustainable Design, Circularity and Consumption

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Introduction

Plastic is an influential tool that moulds nearly every aspect of life for us, so much so that at this point it's challenging to envision a world entirely free of plastics. The production of plastics increased twofold from 2000 to 2019, reaching 460 million tonnes in 2019 alone.¹ Therefore, it's crucial to minimize the effects of plastics on the environment by creating them in a manner that promotes greater eco-friendliness. It is crucial to recognise that creating any design, whether sustainable or otherwise, requires a solid understanding of the materials, forming techniques, and manufacturing tools. Article 5² The Chair's text represents a truly ambitious initiative aimed at reshaping the plastics value chain by incorporating sustainability and circular economy concepts into product design and lifecycle management.

A. Plastic vs Alternatives: Efficiency and Energy Trade-offs

Plastics are indeed produced from fossil fuel feedstocks and various other materials. However, the problem is that the total energy required to produce and fabricate a plastic component is significantly less than any alternative material for that same component.

Reclaiming or recycling plastics from either primary or secondary waste sources will once more consume less energy than alternative materials, consequently conserving downstream energy.

¹ OECD, Global Plastics Outlook: Economic Drivers, Environmental Impacts and Policy Options (OECD Publishing 2022).

² INC to develop an international legally binding instrument on plastic pollution, including in the marine environment, Chair's Text (1 December 2024).

Reclaiming or recycling plastics from either primary or secondary waste sources will once more consume less energy than alternative materials, consequently conserving downstream energy.

The appeal to encourage research on sustainable alternatives and non-plastic substitutes shifts the emphasis from just handling plastic waste to reconsidering material selections completely, however, the profit-driven mentality of manufacturers, who tend to prefer cost and energy-efficient options, is difficult to alter.³

B. Circular Economy and Design Standardisation Challenges

On another note, the Chair's text called for establishing a circular economy for plastic packaging and single-use plastic products; however, one might argue that this is feasible only in a utopian society. Currently, plastic has undergone countless specialisations and customisations, making it challenging to attain a standardised approach to product design.

C. Historical Precedents: The Shift from Glass to Plastics

Historically, circular usage can be observed in the reuse systems of milk containers, soda bottles, and beer bottles. These systems functioned through deposit-return schemes, where end-users received cost reductions when returning empty bottles while purchasing new, full ones. Initially, this process was efficient and widely adopted. However, challenges such as broken glass, increased energy consumption for transporting heavy glass containers, and the additional resources required for cleaning and sanitizing them disrupted the system. As a result, plastics emerged as a more convenient substitute, reducing energy usage, simplifying storage, and eliminating the need for consumers to return bottles to the sales location. While plastics improved efficiency, they also led to a shift away from circularity. Therefore, circular use can only be realised if emphasis is placed on the initial design.

³ *Ibid.* 9.

D. Polymers: Abundance and Design Implications

There are more than 85,000 distinct types of polymers that can be utilised to make plastic items. This can be viewed as both a blessing and a curse.

Ideally, the abundance of polymers available for use renders the product environmentally unfriendly, yet it also offers a broad range of possibilities for the product or part to be designed in various ways. Polymers typically possess important characteristics such as elasticity, strength, flexibility, and longevity. Article 5(b) of the Chair's text calls on parties to support sustainable production through recycling and reuse by fostering "research, innovation, development and use of sustainable and safer alternatives and non-plastic substitutes, including products, technologies and services, taking into account... traditional knowledge, knowledge of Indigenous Peoples and local communities". As a designer, one should concentrate more on how the final products can be reclaimed and reprocessed, and less on waste disposal. However, despite the treaty's recognition of Indigenous and local knowledge in promoting sustainability, challenges remain in ensuring their meaningful participation. For example, during the recent INC-5 meeting, representatives from various communities faced barriers to participation due to space constraints, limiting their ability to contribute to discussions that directly impact them. Addressing these inclusivity issues is essential to creating a truly effective and equitable global plastics treaty.

Article 5(a)(ii) of the Chair's text, which exhorts to "improve durability, reusability, refillability, refurbishability, repairability...promote the use of safe and sustainable additives", addresses enhancing durability and reusability while encouraging the use of safe and alternative additives to support sustainable plastic design. Yet, it fails to detail or discuss strategies that could be implemented to accomplish this aim. One suggestion is to utilise 'monomaterial' whenever possible.

E. Design for Disassembly and Material Reduction

Employing a single type of plastic for various components unlocks the possibility of enhanced circularity, both during manufacturing and upon reaching the end of its lifespan.

This straightforward method allows for the best recyclability routes without the need for steps like disassembly or separating materials.⁴ Plastic substances are particularly suitable for this approach. Snap fittings that are moulded-in, press fittings, and staking/welding joints all do away with the need for fasteners. Nonetheless, achieving success in these areas demands innovative design efforts and in-depth knowledge of manufacturing techniques. This must come along with measures that target “Minimising releases and emissions from plastics and plastic products, including microplastics”, as mentioned in Article 5 (1)(c) of the Chair’s text.⁵ Recent developments within the European Union demonstrate promising regulatory momentum in tackling microplastic pollution at its source. Notably, EU trilogues have advanced toward agreement on measures addressing microplastic pellet loss, an often overlooked but significant contributor to plastic pollution. These negotiations underscore the importance of upstream interventions, including strict controls on pellet handling, transport, and spillage prevention. As noted by legal professionals observing the trilogues, these measures aim to improve traceability and liability within supply chains, signalling a shift toward accountability-driven regulation. This is particularly relevant to the ILBI’s goals, as it suggests that proactive, binding commitments on microplastics are achievable within multilateral frameworks. Integrating similar traceability mechanisms and upstream safeguards into the ILBI could significantly bolster its effectiveness in curbing pollution from the earliest stages

⁴ Sundberg-Ferar, 'How to: Materials Selection in Sustainable Product Design' (2022) <https://sundbergferar.com/how-to-materials-selection-in-sustainable-product-design/> accessed 24 February 2025.

⁵ B Carney-Almroth and others, 'Obstacles to Scientific Input in Global Policy' (2023) 380(6649) *Science* 1021 <https://doi.org/10.1126/science.ad11103> accessed 27 February 2025.

of plastic production.⁶ Almroth⁷ emphasises the necessity of minimising chemical and polymer quantities, creating plastic products with their end-of-life in mind, along with enhanced transparency and reporting to facilitate safer and more efficient recycling. The ILBI could seek to integrate front-end design with back-end plastic recycling, encouraging collaboration between manufacturers and recycling companies. Overall, the focus of the ILBI should be on proactive strategies, such as reducing production and incentivising industries to increase their participation.⁸ When mono-material isn't viable, alternative sustainable product design approaches can be utilised to enable easier disassembly. Intelligent component disassembly methods, tactical fastener approaches, and the mono-material specification of sub-assemblies can remain important in the sustainability equation at the end of life.⁹

Polypropylene and polyethylene in all their variations are considered 'cleaner' materials, as they possess simpler chemistry and lack troublesome chemical additives such as chlorine or styrene.¹⁰ They can be recycled more easily, and there is a higher chance for mono-material manufacturing since the two types of resin are often recyclable for specific applications. Alongside these sustainability benefits, this category of materials is typically inexpensive, easily accessible, highly durable, and flexible for different manufacturing techniques. Nevertheless, there are certain factors to consider, such as material stability, the type of resin used, and design considerations. For example, polypropylene exhibits dimensional instability. Nevertheless, this should not deter manufacturers from utilising it, as there are various alternative design approaches available, including strong joining techniques, ribbing strategies, process control during manufacturing, and even deliberate modifications to the overall shape of the part, which can yield precise components for the majority of applications.

An alternative could include using engineered resins made from renewable materials that show efficient performance.¹¹ These plastics make use of a considerable portion of raw materials sourced from agricultural origins, such as corn, soybeans, castor beans, algae, and sugarcane,

⁶ Amy Youngman, '#PelletRegulation #Trilogues #Microplastics' (LinkedIn, 25 April 2025) https://www.linkedin.com/posts/amy-youngman-7a1b08b1_pelletregulation-trilogues-microplastics-activity-7315677454101065729-RGei/ accessed 30 April 2025.

⁷ B Carney Almroth, E Carmona, N Chukwuone and others, 'Addressing the Toxic Chemicals Problem in Plastics Recycling' (2025) 3 *Cambridge Prisms: Plastics* e3.

⁸ *Ibid.*

⁹ T Jeandin and C Mascle, 'A New Model to Select Fasteners in Design for Disassembly' (2016) 40 *Procedia CIRP* 425 <https://doi.org/10.1016/j.procir.2016.01.084> accessed 27 February 2025.

¹⁰ *Ibid.*

¹¹ *Ibid.*

rather than being sourced from petroleum. Some of these innovative options may require changes to product specifications. It is important to recognise that successful product design must be influenced by the materials planned for utilisation.¹²

Dematerialisation provides an alternative that conserves resources while also reducing energy consumption and waste during production. A key approach for sustainable product development is to simply maximise efficiency. The current design tools offer excellent opportunities for dematerialisation. Optimisation through traditional engineering, computer-aided engineering, and even innovative techniques in generative design can produce robust solutions that use just the required amount of material. Every piece of plastic saved will quickly add up during the manufacturing process¹³.

Creating sustainably with an emphasis on recycling ideas will yield a product and ultimately promote circularity. Circularity is central to both documents. The Chair's Text¹⁴ references "circular economy approaches" as a guiding principle for plastic product design, intending to keep plastics in continual use by enhancing reuse, recycling, and safe disposal according to the waste hierarchy. However, so far, the concept of circularity has been treated rather superficially, being mentioned only briefly in the Chair's explanatory note and not sufficiently defined throughout the Chair's Text. The layout of the initial Zero Draft¹⁵ represents the concept of tackling circularity, indicating measures at every stage of the plastics life cycle, from manufacturing and design to waste management and enduring pollution. This is significant as the majority of plastic circular economy efforts focus on recycling measures, while those at early stages are still not well-examined.¹⁶ Without an explicit delineation of where the "circle" begins and ends (for example, integrating upstream measures like reduced virgin production with downstream recycling and reuse), the ILBI may struggle to drive the transformative change envisioned by its proponents. While the normative case for circularity

¹² *Ibid.*

¹³ Arno Behrens, *Environmental Policy Instruments for Dematerialisation of the European Union* (ResearchGate, 2003) <https://www.researchgate.net/profile/Arno-Behrens/publication/228766017_Environmental_policy_instruments_for_dematerialisation_of_the_European_Union/links/56a0a1e408ace4d26ad6b338/Environmental-policy-instruments-for-dematerialisation-of-the-European-Union.pdf>, accessed on 27 February 2025.

¹⁴ INC to develop an international legally binding instrument on plastic pollution, including in the marine environment, Chair's Text (1 December 2024).

¹⁵ UN Environment Programme, *Zero draft text of the international legally binding instrument on plastic pollution, including in the marine environment*, UNEP/PP/INC.3/4 (4 September 2023).

¹⁶ Sarah King and Katherine E S Locock, 'A Circular Economy Framework for Plastics: A Semi-Systematic Review' (2022) 364 *Journal of Cleaner Production* 132503. 2.

is strong, its practical translation into a binding, enforceable target remains out of reach. Nonetheless, it is crucial to recognise that issues such as the considerable complexity and low transparency of the petrochemical sector, along with the reluctance to share production data, pose a substantial obstacle to setting efficient global and national reduction objectives.¹⁷

A lack of detailed strategies (such as promoting mono-material design or advanced disassembly techniques) may result in continued reliance on low-energy fossil feedstocks despite the aspirational goals of the ILBI.¹⁸ The development of robust essentiality, hazard-based safety, sustainability and transparency criteria will be crucial in guiding the development and implementation of effective reduction targets. The Chair's Text emphasises the need for sustainable plastic design, increased recyclability, and reuse models, marking a shift from waste management to waste prevention. Article 5¹⁹ of the Chair's text outlines measures to improve product durability, reduce single-use plastics, and increase recycled content. While the ILBI's definitions have yet to be established, a clear definition of key terms such as "reusability", "durability", and "single-use plastic" is essential to establish a shared foundation for the future INC, particularly due to the importance of circularity in the Zero Draft. Crucially, the waste hierarchy suggests that prioritising reduction and reuse/refill systems is essential before recycling and waste management. It is important to mention that measures aimed at reducing primary plastic polymer production, although recognised as crucial to the ILBI's objectives, are controversial; the LMG has consistently shifted the emphasis towards recycling as a solution.

It is important to mention that measures aimed at reducing primary plastic polymer production, although recognised as crucial to the ILBI's objectives, are controversial; the LMG has consistently shifted the emphasis towards recycling as a solution.

¹⁷ J Baztan, B Jorgensen, B Carney Almroth and others, 'Primary Plastic Polymers: Urgently Needed Upstream Reduction' (2024) 2 *Cambridge Prisms: Plastics* e7 <http://doi.org/10.1017/plc.2024.8> accessed 27 February 2025.

¹⁸ UNEP, 'Non-Paper: Co-Facilitators' Non-Paper on Subgroup 2.2. Outcomes' (2024) https://resolutions.unep.org/incres/uploads/sg2.2_outcomes_28april2024_22.45_final.docx accessed 27 February 2025.

¹⁹ *Ibid.*, Art. 5. 8.

Nonetheless, attention should not be limited to the recycling process alone but should also include other factors like the recyclability of plastic items. Crucially, O'Meara points out, "the robustness of the scientific evidence must not be eclipsed by discussions on misleading solutions like chemical recycling, which uphold production and fail to adequately address the dangers posed by hazardous chemicals." Regulations of this kind must be supported by the technical and financial resources for states requiring assistance, to enhance successful execution.²⁰

The Chair's text promotes innovation in materials and product design, encouraging the development of non-toxic, sustainable alternatives and safer chemical additives. The Chair's text also exclaims continued support for producer accountability mechanisms, pushing industries to design products that are easier to recycle or reuse, shifting the burden from consumers to manufacturers. Article 8²¹ of the Chair's text strongly addresses the need for better collection, sorting, and recycling infrastructure concerning resilient systems while including the informal waste sector. However, it is pertinent to note that while the Chair's text encourages safer plastic additives, it fails to set clear bans or phase-out timelines for toxic substances.²² This undermines circular economy goals, as contaminated plastics cannot be safely recycled. Without enforceable design criteria, manufacturers may continue production of composite plastics, which are difficult to recycle, products with toxic additives that contaminate recycling streams, and single-use plastics disguised as 'recyclable'.²³

Unlike the ILBI draft, which currently leaves critical implementation details, such as recycled content and design standards, largely to national discretion, the Minamata Convention on Mercury sets binding international obligations, including clear thresholds, phase-out timelines, and restrictions on mercury-added products. This approach ensures a harmonised global framework that non-state actors cannot easily bypass, offering a potential model for the ILBI

²⁰ N O'Meara, 'Human Rights and the Global Plastics Treaty to Protect Health, Ocean Ecosystems and Our Climate' (2023) 38(3) *The International Journal of Marine and Coastal Law* 480 <https://doi.org/10.1163/15718085-bja10143> accessed 27 February 2025.

²¹ *Ibid*, Art 8, pg. 10.

²² IPEN, *A Toxic-Free Circular Economy: Why the Plastics Treaty Must Address Hazardous Chemicals* (2024) <https://ipen.org/toxic-free-circular-economy> accessed 5 February 2025.

²³ Recycling Today, 'INC-5 Concludes Without Global Agreement on Plastics Treaty' (Recycling Today, 2024) <https://www.recyclingtoday.com/news/inc5-concludes-without-global-agreement-on-plastics-treaty/> accessed on 5 February 2025.

to emulate.²⁴ For instance, the EU Green Deal²⁵ and the Circular Economy Action Plan²⁶ set mandatory recycled content for PET bottles, and the Ellen MacArthur Foundation's Global Commitment²⁷ urges brands to eliminate problematic plastics and improve material design. Further, while the Chair's text encourages voluntary national commitments, it fails to cap the production of virgin plastics, nor does it impose clear global targets or timelines to reduce plastic production and consumption. Plastic production is projected to triple by 2050, so recycling alone cannot solve the problem. It is important to consider that without binding reduction targets, major producers (like the U.S., China, and oil-rich nations) may continue expanding plastic production, undermining the ILBI's objectives.²⁸ This approach creates loopholes, where some countries will act while others do not, leading to waste dumping and pollution shifting.

The fourth clause of Article 8 of the Chair's text emphasises producer responsibility approaches that shift the waste management burden from consumers to manufacturers. This aligns with the principle of EPR, which mandates that producers bear responsibility for the environmental impacts of their products throughout their life cycle.²⁹ While EPR models are gaining traction, their effectiveness remains limited by a lack of legally binding obligations to enforce corporate accountability.

Despite the theoretical benefits, EPR schemes face practical challenges in enforcement and industry compliance, often due to corporate lobbying and regulatory loopholes. For instance, in the UK, the implementation of EPR schemes for packaging waste has been delayed multiple times, partly due to lobbying by major food and beverage companies.³⁰ The introduction of a packaging tax aimed at improving recycling rates and reducing plastic waste has been postponed, reflecting industry resistance to financial and operational burdens.

²⁴ Minamata Convention on Mercury (adopted 10 October 2013, entered into force 16 August 2017) <https://www.mercuryconvention.org/en> accessed 26 March 2025.

²⁵ European Commission, '*European Green Deal*' (European Commission, 2019-2024) https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en accessed on 5 February 2025.

²⁶ European Commission, '*Circular Economy Action Plan*' (European Commission, 2020) https://environment.ec.europa.eu/strategy/circular-economy-action-plan_en accessed on 5 February 2025.

²⁷ Ellen MacArthur Foundation, '*Global Commitment: Overview*' (Ellen MacArthur Foundation, 2024) <https://www.ellenmacarthurfoundation.org/global-commitment/overview> accessed on 5 February 2025.

²⁸ Contec, 'European Strategy for Plastics in a Circular Economy' (Contec, 2024) <https://contec.tech/european-strategy-plastics-circular-economy/> accessed on 5 February 2025.

²⁹ OECD (2016), *EPR: Updated Guidance for Efficient Waste Management*.

³⁰ DEFRA (2023), 'EPR for Packaging: Government Response', UK Department for Environment, Food & Rural Affairs.

Many EPR schemes remain voluntary or inadequately enforced, allowing corporations to evade responsibility. Without strict penalties, businesses often fail to invest in sustainable product design or waste management infrastructure.³¹

The lack of binding obligations for corporate accountability under EPR models highlights a systemic weakness in global waste management policies. Negotiations during INC-5 reaffirmed the importance of EPR but failed to establish mandatory international commitments that could ensure uniform enforcement.³² This regulatory gap could allow multinational corporations to exploit weak governance structures in certain regions while appearing compliant in others. Moreover, the dominance of industry lobbying underscores the influence of corporate interests in shaping environmental policy. Major producers, particularly in the plastic packaging and consumer goods sectors, have actively lobbied against stricter regulations, fearing increased costs and supply chain disruptions.

To improve the efficiency of EPR and address current regulatory gaps, various policy actions need to be put into effect. To begin with, governments ought to set mandatory waste reduction and recycling goals, along with strict consequences for non-compliance to guarantee responsibility. The EU's 2020 Circular Economy Action Plan represents progress toward this goal; however, enforcement inconsistencies among Member States dilute its impact.³³ Moreover, financial rewards and penalties need to be implemented, including progressive taxes on single-use or non-recyclable plastics, as well as tax breaks for eco-friendly product design and investments in recycling infrastructure, which have demonstrated their ability to influence corporate behaviour.³⁴ Additionally, it is essential to implement mandatory transparency and corporate accountability measures that compel companies to publicly reveal their plastic footprint, waste management practices, and recycling efforts, thereby ensuring enhanced corporate responsibility in tackling plastic pollution.³⁵

To protect against the impact of industry and lax enforcement, independent regulatory agencies need to be created to oversee EPR execution and stop companies from influencing policies to

³¹ Watkins E, Gionfra S, Schweitzer JP, et al. (2019), *EPR in the EU: Challenges and Opportunities*, Institute for European Environmental Policy. (the clash between voluntary and mandatory compliance which highlights that voluntary compliance while it upholds the principle of 'common but differentiated responsibility' can also undermine the motivation of countries in actively taking part in doing their bit to reduce plastic pollution).

³² UNEP (2024), 'Non-Paper: Co-Facilitators' Non-Paper on Subgroup 2.2. Outcomes'.

³³ European Commission (2020), *Circular Economy Action Plan*.

³⁴ OECD (2022), *Global Plastics Outlook: Economic Drivers, Environmental Impacts and Policy Options*.

³⁵ Greenpeace (2022), *Corporate Plastic Lobbying: Blocking Action on Waste Reduction*.

benefit themselves.³⁶ Finally, a universally standardised EPR framework under UNEP or the ILBI is essential to align EPR regulations across different jurisdictions, avoiding regulatory arbitrage, where businesses take advantage of less stringent environmental laws in some nations while seeming compliant in others.³⁷ If adequately enforced, these actions would greatly enhance EPR as a means for transforming the circular economy, ensuring that producers assume complete responsibility for the environmental effects of their products over their entire lifecycle.

The Montreal Protocol³⁸ successfully phased out Chlorofluorocarbons (CFCs) with binding reduction targets. A similar approach can be adopted for virgin plastic production in the ILBI. California's SB-54 Law (2022)³⁹ mandated a 25% reduction in plastic packaging by 2032⁴⁰ setting a proper, quantifiable, and binding target to adhere to. This ensures that producers and policymakers are held accountable for meeting concrete reduction goals, rather than making vague commitments.

Conclusion

In conclusion, the narrative arising from the INC meetings reflects significant aspirations moderated by difficulties in execution. The Chair's Text presents a strong normative argument for sustainable design and circularity; however, earlier versions of the text, the Zero Draft and RZD, as well as subsequent critical evaluations, show that, without clear definitions, quantifiable targets, and enforcement measures, these concepts could remain merely aspirational. Additionally, the ILBI should explicitly address consumption habits to achieve a notable decrease in plastic manufacturing. The ultimate instrument needed to reshape the plastics value chain must incorporate sustainable design, circularity, and reduced consumption into a unified, enforceable framework that tackles the complete lifecycle of plastics.

³⁶ Watkins E, Gionfra S, Schweitzer JP, et al. (2019), *EPR in the EU: Challenges and Opportunities*, Institute for European Environmental Policy.

³⁷ *Ibid*, 28.

³⁸ UN Environment Programme (UNEP), 'About the Montreal Protocol' (UNEP, 2024) <https://www.unep.org/ozonaction/who-we-are/about-montreal-protocol> accessed on 5 February 2025.

³⁹ *SB-54: Solid Waste: Reporting, Packaging, and Plastic Food Service Ware Reduction* (California 2022) <https://leginfo.legislature.ca.gov> accessed 26 March 2025.

⁴⁰ Madeleine Speed, 'Countries Remain at Loggerheads as UN Plastics Treaty Talks Resume' (*Financial Times*, 25 November 2024) <https://www.ft.com/content/7f9b3b55-0090-4d71-a78e-853d30c176fe> accessed on 5 February 2025.

Although the UNEA, through its mandate for negotiation of the ILBI, envisions an instrument that addresses plastics throughout their entire lifecycle, the focus of the Chair's Text leans towards downstream measures around production and waste management and less on curbing consumption. National action plans discussed in the Co-Facilitators' Non-Paper on Subgroup 2.2. Outcomes appear to offer limited measures for reducing the overall consumption of plastics, even as production volumes are projected to rise dramatically. Without strong, measurable consumption reduction targets and market incentives (like binding reduction schemes seen in other environmental agreements), efforts may only manage waste rather than reduce plastic use at its source.⁴¹

The phasing out of plastics is essential for mitigating environmental damage and reducing greenhouse gas (GHG) emissions. A transition towards sustainable design and circularity is critical in achieving this goal, as traditional plastic production follows a linear model of extraction, usage, and disposal, leading to significant waste and pollution.⁴² To counter this, sustainable product design must emphasise material efficiency, longevity, and recyclability by eliminating non-recyclable additives, increasing product durability, and adopting modular designs that enable disassembly and reuse.⁴³ However, despite growing awareness, only 20% of plastic waste is currently recycled, largely due to inefficiencies in sorting and contamination.⁴⁴ Expanding mechanical and chemical recycling is necessary, but requires substantial investment and innovation. Additionally, replacing plastics with biodegradable alternatives, such as bioplastics and natural fibres, presents an opportunity to reduce dependency on fossil-based plastics, although concerns remain over their high production costs and land-use competition.⁴⁵

The complete phase-out of fossil-based plastics requires systemic changes, including legally binding reduction targets, increased recycling, and alternative feedstocks. Currently, plastics production accounts for 9% of global oil consumption, and under business-as-usual scenarios,

⁴¹ UNEP, 'Non-Paper: Co-Facilitators' Non-Paper on Subgroup 2.2. Outcomes' (2024) https://resolutions.unep.org/incres/uploads/sg2.2_outcomes_28april2024_22.45_final.docx accessed 27 February 2025.

⁴² Scott, Andrew, Pickard, Sam, Sharp, Samuel, and Becqué, Renilde, *Phasing Out Plastics*, ODI Report, Overseas Development Institute (ODI), London, September 2020. Available at: <https://hdl.handle.net/10419/233930>, at pg. 8.

⁴³ *Ibid*, 38. 23.

⁴⁴ Scott, Andrew, Pickard, Sam, Sharp, Samuel, and Becqué, Renilde, *Phasing Out Plastics*, ODI Report, Overseas Development Institute (ODI), London, September 2020, p. 25. Available at: <https://hdl.handle.net/10419/233930>.

⁴⁵ *Ibid*, 40, 25.

this figure is expected to triple by 2050, contributing significantly to climate change.⁴⁶ However, a low-plastic-consumption scenario could cut emissions by 65%, primarily through reduced plastic use, renewable energy integration, and improved waste management.⁴⁷ Phasing out plastics would also necessitate halving oil and gas demand for plastic production, challenging the petrochemical industry's long-term investments in expanding plastic manufacturing.⁴⁸ While bioplastics and synthetic feedstocks offer alternatives, their viability depends on overcoming high costs and scaling up production, as biomass-based plastics currently account for less than 1% of total plastic production.⁴⁹

To ensure a successful transition, governments must ban non-essential single-use plastics and enforce EPR policies, making manufacturers accountable for their products' end-of-life management.⁵⁰ Global regulatory frameworks, like the ILBI, could standardize policies across jurisdictions and prevent regulatory arbitrage, where corporations exploit weaker environmental laws in certain regions.⁵¹ Additionally, investments in advanced recycling technologies and public-private partnerships are necessary to build the infrastructure needed for large-scale plastic waste management.⁵² Without bold policy actions, corporate responsibility, and widespread adoption of circular economy principles, plastics will continue to pose a severe environmental and climate threat beyond 2050.

This account illustrates the evolving discussions in INC negotiations—a conversation that seeks to reshape global plastics governance while contending with the intricacies of material science, market dynamics, and international policy needs.

⁴⁶ *Ibid*, 40, 8.

⁴⁷ *Ibid*, 40, 28.

⁴⁸ *Ibid*, 40, 28.

⁴⁹ *Ibid*, 40, 25.

⁵⁰ *Ibid*, 40, 23.

⁵¹ *Ibid*, 40, 30.

⁵² *Ibid*, 40, 26.

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Chapter 6

Human Rights-Based Approach

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Introduction

It is necessary to establish the relevant provisions from all the text negotiated at the INC meetings in order to evaluate the extent to which human rights have been considered and included specifically in three contexts. These contexts include rights holders, human rights and a just transition, and the human right to health. In the context of rights holders, this includes any mention of Indigenous people's knowledge and traditional/local community knowledge, informal workers, artisanal and small-scale fishers, waste pickers, women and youth/children and non-governmental bodies. In the category of human rights and a just transition this includes any mention of the recognition of human rights themselves and the need for a just transition in ending plastic pollution. In the category of the human right to health this includes any mention of the need to protect human health from the damaging effects of plastic pollution. There is slight differentiation in the recognition and support of a human rights-based approaches between the first and last Reports by the INC which will be referred to in the following text as INC texts 1.5 up to 4.5 respectively which are the Reports of the INC to develop an ILBI on plastic pollution including in the marine environment, on the work of its different sessions. A lot of the initial considerations regarding human rights have been diluted and reduced significantly in the detail provided in recognising rights holders, human rights and a just transition and the human right to health by the time the chairs text was produced. A summary of the relevant developments through the text as well as an analysis of the impact of the relevant inclusion and exclusions on human rights will follow.

A. Summary of reports and relevant provisions under all texts

1. Rights holders

It is important to note that INC-1.4 does not make mention of a human rights aspect in the layout of the proposed provisions in terms of recognising indigenous people's knowledge, traditional knowledge, the protection of and contributions from the informal working sector including artisanal fishers, and women and children. However, the INC-1.5 report mentions

that there was widespread support to recognise all stakeholders which included the above groups, specifically in terms of informal waste pickers and disadvantaged groups.¹ There is support for the incorporation of indigenous and local knowledge in terms of how existing knowledge bases can inform the development and implementation of the ILBI.² One of the most contentious issues since the negotiations on the ILBI began has been the involvement and participation of the relevant stakeholders in the actual negotiations in order to provide them with a voice and ensure their active contribution in the meetings. In the report the value of such stakeholder participation is highlighted through written submissions and their participation in workshops and webinars,³ where member states were called upon in the second round of negotiations for INC-2.5 to find solutions that involve key stakeholders and allow for their full engagement.⁴ The representatives speaking on behalf of the Asia-Pacific States, in both INC-2.5 and 3.5, emphasised the importance of incorporating traditional and local knowledge in the life-cycle approach to plastics. They stressed the need to apply the best practices in the field for involving relevant stakeholders, including those in the informal sector.⁵ The representative for the SIDs also provided that local and Indigenous People should be included in regulatory environments for state and non-state actors to participate in solving the problems of plastic pollution.⁶

In terms of waste management, it was suggested that waste pickers and social factors should be considered in terms of the cross-cutting issues between human health, the role and interests of Indigenous People and gender responsive measures.⁷ This concept was reiterated in all of the following INC texts up to INC-4.5.⁸ Rights holders were considered under the promotion of using safe, sustainable and alternative uses to plastic, where traditional knowledge and local

¹ UN Environment Programme (UNEP), *Report of the INC to Develop an International Legally Binding Instrument on Plastic Pollution, Including in the Marine Environment, on the Work of Its First Session* UNEP/PP/INC.1/5. (28 November 2022) at pg. 3.

² UN Environment Programme (UNEP), *Report of the INC to Develop an International Legally Binding Instrument on Plastic Pollution, Including in the Marine Environment, on the Work of Its Third Session* UNEP/PP/INC.1/4. (2 March 2022) at para 22.

³ *Supra* note 2 at para 25.

⁴ UN Environment Programme (UNEP), *Report of the INC to Develop an International Legally Binding Instrument on Plastic Pollution, Including in the Marine Environment, on the Work of Its First Session* UNEP/PP/INC.2/5. (7 July 2023) at para 11.

⁵ *Supra* note 4 at para 81.

⁶ *Supra* note 4 at para 87.

⁷ *Supra* note 4 at para 59.

⁸ UN Environment Programme (UNEP), *Report of the INC to Develop an International Legally Binding Instrument on Plastic Pollution, Including in the Marine Environment, on the Work of Its First Session* UNEP/PP/INC.4/5. (6 May 2024) at pg. 7.

communities might have solutions in this area.⁹ There was further consideration for rights holders in the report in terms of a just transition, but more in consideration of an inclusive transition of the informal waste sector, specifically in bringing awareness to the negative impacts of plastic pollution on Indigenous People and the capacity constraints they face.¹⁰ Additionally, the report highlighted the importance of exchanging information on indigenous knowledge.¹¹ In recognising traditional and Indigenous knowledge and practices, the most appropriate processes should be used so that this information is used effectively in informing annexes, regulatory timetables and the necessary regulatory actions.¹² There are priority considerations for vulnerable groups in INC-3.5 and INC-4.5 in regard to the specific rights holders and coastal communities which were also included.¹³ In terms of intersessional work during INC-4.5, it was agreed that waste pickers needed to be part of the solution in addressing legacy pollution and providing new and more decent jobs for the informal sector.¹⁴ INC-4.5 emphasised the importance of recognising Indigenous Peoples' views at the national level to ensure the effective implementation of the instrument, while also including all stakeholders.¹⁵

2. Human rights and a just transition

The report mentions that there is a need to go beyond voluntary measures in terms of recognising the right to a healthy environment, and therefore it is essential to do this with the adoption of a human rights-based approach as well as a gender perspective.¹⁶ Furthermore, it was recognised that a just transition should form part of the ILBI objectives.¹⁷ It was stressed in the opening remarks of the second INC report that the negotiations should be centred around redesigning plastics and the system in which they exist, in order to ensure the right to a healthy environment could be achieved.¹⁸ In facilitating a just transition the report for INC-2 provided that this was most necessary in poverty alleviation, and there is a great need for a human rights-based approach in the ILBI. Additionally, the standards for waste management and EPR were

⁹ *Supra* note 1 at para 70.

¹⁰ *Supra* note 4 at para 82.

¹¹ *Supra* note 4 at pg. 25.

¹² UN Environment Programme (UNEP), *Report of the INC to Develop an International Legally Binding Instrument on Plastic Pollution, Including in the Marine Environment, on the Work of Its First Session* UNEP/PP/INC.3/5. (1 December 2023) At pg. 8.

¹³ *Supra* note 12 at pg. 12.

¹⁴ *Supra* note 8 at pg. 2.

¹⁵ *Supra* note 8 at pg. 11.

¹⁶ *Supra* note 1 at para 5.

¹⁷ *Supra* note 1 at para 8.

¹⁸ *Supra* note 4 at para 10.

noted in terms of contributing to a just transition.¹⁹ Representatives speaking on behalf of the Latin American and Caribbean States in the report for INC-3.5 provided that the interpretation and implementation of the ILBI should be guided by human rights and their promotion and protection as well as the best available traditional and Indigenous knowledge.²⁰ The report also drew a link between a just transition and the need for protection of waste pickers and their importance in EPR as well as the means of implementation for justice and the reduction of inequality.²¹ In INC-4.5 a just transition was mentioned again multiple times in very brief terms but with reference to the inclusions of a space for private sectors to thrive in a new and sustainable economy.²²

3. Human right to health

INC-1.5 does not recognise the need for the ILBI to be cognisant of human rights and the impact that plastics have on human health, apart from footnote 7 which references the importance of protecting human health in terms of other instruments like the Basel Convention.²³ The report mentions that human health must be protected in terms of providing a legally binding instrument that provides for the full lifecycle of plastics.²⁴ The proposed objectives and scope of the ILBI were identified as needing to include recognition and protection of human health in the construction of its provisions.²⁵ Representatives speaking on behalf of African States at INC-2 mentioned in their general statements, that the objectives of the instrument should be to end plastic pollution in order to protect human health and the health of the environment.²⁶ Further, at INC-3.5 the same representative reiterated that this should be done to ensure a fair, equitable and inclusive transition for affected populations which includes the relevant rights holders.²⁷ INC-4.5 has similar iterations that the ILBI should be focused on ending plastic pollution for the protection of human health and the environment.²⁸

¹⁹ *Supra* note 4 at para 85.

²⁰ *Supra* note 12 at pg. 8.

²¹ *Supra* note 12 at pg. 18 & 19.

²² *Supra* note 8 at pg. 2.

²³ *Supra* note 1 at pg. 3, Convention on the Control of Transboundary Movement of Hazardous Wastes and Their Disposal (adopted 22 March 1989, entered into force 5 May 1992) 1673 U.N.T.S. 126.

²⁴ *Supra* note 2 at para 90.

²⁵ *Supra* note 4 at para 7 & 8.

²⁶ *Supra* note 4 at para 80.

²⁷ *Supra* note 12 at pg. 7.

²⁸ *Supra* note 8 at pg. 2.

4. Chairs text December 2024²⁹

The following is a brief mention of the relevant provisions in terms of rights holders, human rights and a just transition and the human right to health that are reflected in the Chairs Text, demonstrating the dilution of recognition for the human rights-based approach.

- **Point 3 of Preamble** recognises the importance of the contribution from workers of lower informal sectors.
- **Point 4 of Preamble** acknowledges traditional knowledge and Indigenous knowledge systems.
- **Article 1bis** mentions universal respect for all human rights, freedom, and the right to development as an inherent human right.
- **Article 3(5)** provides that the review committee must consider the best available science and relevant traditional knowledge and systems when looking at the proposals for plastic submission.
- **Article 3(6)(e)** provides for the incorporation of traditional knowledge when taking recommendations on possible actions in respect of plastic products.
- **Article 5(b)** simply acknowledges Indigenous knowledge.
- **Article 7(c)** provides that each party shall take measures to prevent, reduce and eliminate plastic pollution while considering the needs of artisanal and small-scale fishers.
- **Article 8(2)(f)** promotes a just transition with regard for workers (women, youth, informal, artisanal fishers).
- **Article 9(2)(b) and (c)** provides for cleaning up existing plastic pollution with the use of the knowledge from Indigenous communities.
- **Article 10(1) and (2)** provides for a just transition, where nobody is left behind, and it recognises workers.
- **Article 12(2)** provides for capacity building and technology transfer through stakeholders including Indigenous communities.
- **Article 17(1)(c)** provides for information exchange between parties and indigenous communities with their traditional knowledge also related to provisions a) and b).

²⁹ INC, *Chair's Text: International Legally Binding Instrument on Plastic Pollution, Including in the Marine Environment* (1 December 2024).

- **Article 18(3)(c)** provides for the advance research, development, innovation and cooperation by incorporating Indigenous knowledge and communities.
- **Article 19 (health option 1 and 2)** is a potential standalone article on human health impacts of plastic pollution, highlighting human health as a fundamental right.
- **Article 20(5)(b)** provides that the Conference of the Parties must cooperate with non-governmental bodies.

B. Analysis of the text and its development thus far:

1. Aspects relating to Rights Holders:

In the INC documents leading up to the Chair's Text, there is considerable acknowledgment of Indigenous peoples, local communities, workers in the informal sector, and women and children in relation to information exchange, capacity building, legal and financial support, and overall recognition of their contributions to addressing plastic pollution. However, the Chair's Text has reduced this recognition to a mere checkbox exercise, mentioning these key stakeholders only briefly in discussion on plastic pollution across various sectors.³⁰ It is clear from scientific research that woman, children, low-income and other vulnerable groups including Indigenous communities are the most disproportionately affected by the dangers of plastic pollution in terms of health and the environment.³¹ Due to this evidence, those that are the most greatly affected by plastic pollution should be the first ones in mind when creating policies and protections.³²

³⁰ There have been several critiques of the ILBI negotiations in their exclusionary procedures to discuss the contents of the proposed treaty where many barriers of access have been put in place limiting the meaningful contributions of relevant stakeholders especially voices from Indigenous Communities. Collaborative for Health and the Environment “Plastics Treaty Negotiations: Who has a seat at the table?” (21 November 2024).

³¹ N. O'Meara, “Human Rights and the Global Plastics Treaty to Protect Health, Ocean Ecosystems and Our Climate” 2023 *IJMCL* at pg. 482.

³² P. Pathak, “Human Rights Approach to Environmental Protection” 2014 OIDA at pg. 22.

Those rights holders most impacted by plastic pollution must be central to the protections established in the ILBI. This is essential to recognizing the critical role of Indigenous communities, traditional knowledge holders, sector workers, and women and children—not only as vulnerable groups needing protection, but also as key contributors to meaningful solutions.

The International Indigenous Peoples Forum on Plastics has condemned the Chairs Text, criticizing the exclusion of Indigenous peoples.³³ They argue that this exclusion stems from a systemic effort to make decisions about their land, future, and knowledge without their input, as their voices are not directly represented in the text, which merely acknowledges their knowledge.³⁴ The Women’s Working Group on ending plastic pollution holds a similar stance in that there has been little recognition of gender perspectives in the reports leading up to the chairs text and only a brief mention of women when dealing with the main rights holders concerned in the ILBI.³⁵ There has been further concern that the very articles in the Chairs Text that mention Indigenous People were negotiated without their involvement. The lack of transparency and exclusion of observers during these negotiations further highlights the issue as does the closed off intercessional discussions that limited Indigenous peoples input.³⁶ This illustrates that the text offers only superficial recognition, where the rights of Indigenous peoples, along with the inclusion of their knowledge and experiences, as well as those of other key rights holders, are briefly mentioned, but it does not genuinely represent their perspectives or input.

A representative of Indigenous peoples at the INC meetings stated that, while Indigenous communities have numerous solutions to help address the plastic crisis, their voices have been silenced and their perspectives overlooked, which fails to accurately reflect a just transition.³⁷ The Chair’s Text fails to account for the rights of Indigenous people, merely acknowledging their “knowledge” instead. This limited recognition is problematic as it

³³ Indigenous Peoples Major Group “INC Submissions” Member Statements from INC-2 (15 August 2023).

³⁴ Earth Negotiations Bulletin ‘Summary of the First Session of the Fifth Session of the INC to Develop an International Legally Binding Instrument on Plastic Pollution: 25 November – 2 December 2024’ Vol 36 (accessed at: bit.ly/plasticsINC5 on 5 February 2025) at pg. 10.

³⁵ *Ibid.*

³⁶ *Ibid.*

³⁷ *Ibid.*

does not adequately allow for their participation or for their right to self-determination to be realised.³⁸ Furthermore, the Chair's Text makes no reference to the UN Declaration on the Rights of Indigenous Peoples, a crucial instrument for ensuring the proper inclusion of Indigenous Peoples and their knowledge as an essential component of the objective to end plastic pollution.³⁹ It would be beneficial for the ILBI's future credibility and use to ensure that not only the best available science but also the best available traditional knowledge is used to develop the Chair's Text.⁴⁰

2. Aspects relating to Human Rights and a Just transition:

It is essential that more human rights language and acknowledgment is incorporated into the ILBI, as doing so would not alter the treaty text but rather strengthen the existing obligations of all parties under other international regulations and treaties.⁴¹ The language that has been used should be replaced with legally binding language in order to change the voluntary approaches into binding ones.⁴² This would enhance policy compliance and ensure that states are doing everything in their power to respect, protect and fulfil their obligations regarding human rights. In aligning further with human rights, it will allow the treaty to have more transparency, equity and inclusivity which are all essential elements of a just transition.⁴³ In order to fully integrate human rights into the text there must be a cross referencing of other relevant human rights provisions to which States are party in order to show the integration of human rights in the treaty. The ILBI should have provisions that include mechanisms to ensure a just transition throughout the lifecycle of plastics that ensures fairness to workers, communities and businesses.⁴⁴ Further there should be qualifiers attached to the human rights

³⁸ United Voices of the Arctic "Inuit Rights Overlooked in Critical Draft of Global Plastic Treaty at INC-5" (4 December 2024).

³⁹ UN Declaration on the Rights of Indigenous Peoples (adopted 13 September 2007) 61/295.

⁴⁰ N. O'Meara, "Human Rights and the Global Plastics Treaty to Protect Health, Ocean Ecosystems and Our Climate" 2023 *IJMCL* at 496.

⁴¹ Centre for International Environmental Law "Ensuring a Human-Rights based Approach to the International Legally Binding Instrument to End Plastic Pollution, Including in the Marine Environment" (November 2024).

⁴² Centre for International Environmental Law "Initial Reactions to Chair of the INC's Third Non-Paper" (November 2024).

⁴³ *Ibid.*

⁴⁴ International Institute for Sustainable Development; Earth Negotiations Bulletin; Geneva Environmental Network "Ahead of INC-5, Panel Updates on State of Play in Plastic Treaty talks" (16 October 2024).

aspects mentioned, as there are currently only voluntary measures regarding human rights in the text which are not enforceable and unlikely to be as effective.⁴⁵

The treaty currently lacks provisions for remedies addressing existing human rights violations caused by plastic pollution, as well as recognition of the need for access to justice.⁴⁶

To successfully integrate a human rights-based approach, public participation must be ensured, particularly for relevant rights holders, to address past violations and enforce accountability. The most effective way to achieve this is by explicitly embedding human rights language in the preamble and objectives, establishing from the outset that human rights are fundamental to the goal of ending plastic pollution.

The Chair's Text lacks provision for remedies addressing the existing human rights violations caused by plastic pollution as well as recognition of the need for access to justice in making the treaty more centred around human rights.⁴⁷ To successfully integrate a human rights-based approach, public participation processes that have special recognition for the relevant rights holder must be ensured, to address past human rights violations as well as ensuring accountability for all actors under the plastics treaty to enforce human rights fulfilment.⁴⁸ The most effective way to achieve this is by explicitly embedding human rights language in the preamble and objective of the text, thereby establishing from the outset that human rights are fundamental to the goal of ending plastic pollution.⁴⁹

3. Aspects Relating to the Human Right to Health:

The human right to health is not explicitly mentioned in INC texts but is referred to in terms of protecting and recognising the impacts that plastic pollution has on human health and making provision for mitigating the damaging effects of plastic pollution. There has been a call for

⁴⁵ *Ibid.*

⁴⁶ UNHRC "Plastic Pollution a Global Threat to human rights, say UN experts" (21 November 2024).

⁴⁷ *Ibid.*

⁴⁸ *Ibid.*

⁴⁹ *Ibid.*

stronger language to be used in the text that respects the human right to health and provision for a just transition to an economy that does the same.⁵⁰ The human right to health should be a cross-cutting element throughout the entirety of the ILBI and not just focused in a single section.⁵¹ In conjunction with integrating the human right to health into the ILBI text, it has also been proposed that the human right to a healthy environment should accompany the right to health as they are inextricably linked in the context of a plastic pollution free environment.⁵² In order to fully recognise the human right to health and how negatively it could be affected by plastic pollution, the treaty must recognise the full life cycle of plastics in order to include every aspect and situation that could impact this human right.⁵³ It is also necessary to recognise the human right to health that the relevant rights holders, mentioned above, should enjoy in terms of this treaty and in general, whereby they will be the ones who are most negatively affected and have restricted access to this right in terms of plastic pollution.⁵⁴ An example of this is the impact that plastic has been having on the Indigenous People in the Arctic whereby their right to human health has been negatively impacted.⁵⁵ These Indigenous Communities are the first to be impacted by plastic pollution and it is therefore essential that the treaty must recognise that each stage of the plastics life cycle causes harm to human health and is detrimental to the fulfilment of this right in totality.⁵⁶

The Chair's Text does not provide sufficient remedies for those that have already been impacted specifically in respect of their human right to health by the plastic crisis, and provision for this must be made in the ILBI if there is to be a successful just transition.⁵⁷ Those that are disproportionately affected by plastic pollution need immediate relief from the impacts and a genuine commitment to upholding their human right to health in the ILBI. Human rights should be at the core of the ILBI and as opposed to the subtle mention of them provided in the Chair's Text and the preceding Zero Draft and RZD. Human rights are essential in terms of the relevant

⁵⁰ Earth Negotiations Bulletin 'Ahead of INC5 Panel Updates on State of Play in Plastic Treaty Talks' 16 October 2024.

⁵¹ *Supra* note 38.

⁵² N. O'Meara, "Human Rights and the Global Plastics Treaty to Protect Health, Ocean Ecosystems and Our Climate" 2023 *IJMCL* at 480.

⁵³ *Ibid.*

⁵⁴ *Ibid.*

⁵⁵ P. Miller et al, "The Arctic's Plastic Crisis: Toxic Threats to Health, Human Rights, and Indigenous Lands from the Petrochemical Industry" International Pollutants Elimination Network and Alaska Community Action on Toxics (April 2024).

⁵⁶ UN "Global Plastics Treaty: UN expert calls for centrality on human rights" (21 November 2024).

⁵⁷ UN "Global Plastics Treaty: UN expert calls for centrality on human rights" (21 November 2024).

rights holders and especially in terms of having a just transition. There must be a greater recognition of the human right to health in the text but, on a broader scale, there must be a revision of the text to place human rights at its core and ensure that every aspect of the treaty is cognisant of this and includes provisions that recognise the importance of fulfilling human rights in ending plastic pollution.⁵⁸

Human rights must be central to the ILBI, ensuring a just transition and the recognition of all rights holders. The text must go beyond acknowledging the right to health—it requires a fundamental reshaping to place human rights at its core. The ILBI must reflect the urgent need to fulfil human rights as a cornerstone of ending plastic pollution.

⁵⁸ The GW Law Environmental and Energy Law Blog “Human Rights: The Pending Issue in the Upcoming Global Plastics Treaty” (28 August 2024) Accessed on 25 February 2025 at <https://blogs.gwu.edu/law-gwpointhouse/2024/08/28/human-rights-the-pending-issue-in-the-upcoming-global-plastics-treaty/>.

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Chapter 7

Regime Interaction

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Introduction

In the realm of international environmental governance, regime interaction refers to the interplay between various legal frameworks and institutions that address overlapping environmental issues. According to Margaret. A. Young, regimes are a “set of norms, decision-making procedures and organisations coalescing around functional issue areas and dominated by particular modes of behaviour assumptions and biases”.¹ Environmental agreements often operate within the same policy space but with differing mandates, objectives, and enforcement mechanisms. These interactions can produce both synergies and conflicts, shaping the effectiveness of global environmental governance. For example, agreements dealing with climate change, biodiversity, marine pollution, and hazardous waste often overlap in their goals and target areas, leading to complex and interdependent relationships.²

Regime interaction can enhance coherence when agreements align and reinforce each other’s strengths, such as the integration of climate policies with SDGs. Conversely, it can create fragmentation, where conflicting norms, duplicative efforts, and jurisdictional disputes arise.³ This happens when instead of a unified global legal system, states have developed multiple treaties and institutions to address specific issues. This has led to overlapping legal regimes in areas such as trade, human rights, and environmental protection, creating challenges in resolving conflicts between them.

Multilateral agreements can focus on similar issues in different ways which poses challenges. For instance, both climate change agreements and biodiversity agreements focus on the conservation of forests. Climate change agreements may prioritise forests for CO₂ reduction,

¹ Margaret A. Young, *Regime Interaction in International Law: Facing fragmentation* (2012), Cambridge University Press, 85

² Klerk, Bastiaan Ewoud, “Protecting the marine environment from the impacts of climate change: A regime interaction study.” (2022). Review of European, Comparative and International law. <https://doi-org.ucc.idm.oclc.org/10.1111/reel.12487>. Accessed on 3 February 2025.

³ Morgan, J. C. “Fragmentation of International Environmental Law and the Synergy: A Problem and a 21st Century Model Solution” (2016). *Vermont Journal of Environmental Law*, 18(1), 134–172. <http://www.jstor.org/stable/24859521>. Accessed on 3 February 2025.

while biodiversity agreements may focus on conservation of forests for the purposes of flora and fauna preservation.⁴ Unlike domestic legal systems, international law lacks a hierarchical structure to manage these interactions effectively.⁵ Understanding these interactions is crucial for promoting an integrated approach to environmental protection and ensuring that international agreements work together toward common global goals.

The ILBI emerges in a complex and fragmented landscape of international environmental governance, interacting with multiple regimes that govern, *inter alia*, marine pollution, waste management, trade, and human rights.⁶ This overlapping of mandates and responsibilities presents both opportunities for synergy and risks of fragmentation. In global governance, fragmentation is an inherent structural feature that can either enhance cooperation or lead to conflicting regulations and inefficiencies.

The success of the ILBI will depend on how effectively it aligns with and complements existing frameworks, such as the UN Convention on the Law of the Sea (UNCLOS) and the Basel Convention, without creating regulatory conflicts.

Understanding these interactions is essential for designing a treaty that promotes coherence and coordination in this crowded governance space. As the treaty negotiates its place within this regime complex, it will play a crucial role in shaping the future of global plastic governance and addressing marine plastic pollution comprehensively.

A. Key Areas of Regime Interaction

1. Marine Environmental Governance

Marine plastic pollution represents a significant global environmental challenge, necessitating a complex, multi-regime approach to governance. The UNCLOS⁷ and the International

⁴ International Union for Conservation of Nature (IUCN), 'Forests and Climate Change' (IUCN Issues Brief, 2024) <https://iucn.org/resources/issues-brief/forests-and-climate-change> accessed 10 March 2025.

⁵ Supra Note 1

⁶ Mendenhall E. Building a regime complex for marine plastic pollution (2023). Cambridge Prisms: Plastics, 1, e12, 1–6 <https://doi.org/10.1017/plc.2023.12>

⁷ UN (UN) Convention on the Law of the Sea (adopted 10 December 1982 entered into force 1 November 1994), 1833 U.N.T.S. 397 [hereinafter UNCLOS]

Convention for the Prevention of Pollution from Ships ('MARPOL')⁸ provide crucial frameworks for regulating marine pollution, but the ILBI seeks to fill gaps and bridge overlaps by enhancing coherence between these regimes. Its primary focus has been integrating its legally binding measures with existing commitments under UNCLOS and MARPOL, ensuring consistent international efforts in addressing marine plastic pollution.

Cooperation between UNCLOS and the ILBI is both natural and necessary, given their shared objectives of protecting marine environments. UNCLOS establishes general obligations for states to prevent, reduce, and control pollution of the marine environment⁹ while the ILBI specifically targets plastic pollution, one of the most pervasive threats to marine ecosystems. Article 7 of the Zero Draft deals with releases and leakages which include plastic pollution from fishing activities.¹⁰ This alignment creates opportunities for collaboration in areas such as marine pollution prevention, scientific research, and capacity building.¹¹ For instance, UNCLOS provides a broad framework for addressing land-based and sea-based sources of pollution, which the ILBI can build upon by introducing specific measures to tackle plastic waste, such as reducing single-use plastics and promoting clean-up initiatives. Additionally, UNCLOS emphasises the importance of marine scientific research and environmental monitoring,¹² which can support the ILBI's efforts to monitor plastic pollution and its impacts on marine biodiversity. Institutional mechanisms under UNCLOS, such as the International Maritime Organisation (IMO)¹³ and regional seas programs, can further facilitate cooperation by working with the ILBI's governance structure to harmonise efforts and share best practices. The two regimes can enhance their collective impact in addressing marine plastic pollution by leveraging these synergies.

⁸ International Convention for the Prevention of Pollution from Ships (as Modified by the 1978 Protocol) (adopted 2 November 1973, entered into force 2 October 1983) 1340 UNTS 61.

⁹ UNCLOS, Article 194.

¹⁰ UN Environment Programme (UNEP), Revised draft text of the international legally binding instrument on plastic pollution, including in the marine environment, (2023), [Hereinafter Zero Draft].

¹¹ Supra note 6.

¹² UNCLOS, article 204.

¹³ Supra note 6.

Integration between UNCLOS and the ILBI is essential to ensure a cohesive and comprehensive approach to marine protection. The ILBI can complement UNCLOS by providing detailed measures to address plastic pollution, which falls under the broader mandate of marine pollution prevention outlined in UNCLOS.

For example, Article 207 of UNCLOS calls on states to adopt laws and regulations to prevent land-based pollution,¹⁴ and the ILBI can build on this by introducing specific guidelines to reduce plastic waste from land-based sources, such as single-use plastics and microplastics. Similarly, Article 211 of UNCLOS addresses pollution from ships, including the discharge of plastics,¹⁵ and the ILBI can strengthen these provisions by promoting stricter regulations on plastic waste disposal by vessels.

A comprehensive approach to marine protection can be achieved by aligning the ILBI's focus on the full lifecycle of plastics with UNCLOS's legal framework for marine environmental protection. UNCLOS, particularly in Part XII, mandates states to prevent, reduce, and control pollution of the marine environment from various sources, including land-based activities, which are a major contributor to plastic pollution.¹⁶ By integrating the ILBI's lifecycle approach with UNCLOS's provisions on pollution control and ecosystem-based management, states can ensure that plastic reduction efforts are legally and operationally consistent with existing maritime obligations. Additionally, UNCLOS incorporates the precautionary principle, which emphasises taking preventive action even in the absence of full scientific certainty, a concept echoed in discussions on plastic pollution control. However, integration faces challenges such as, differing priorities between the two regimes and the legal complexity of navigating their overlapping frameworks. For instance, UNCLOS covers a wide range of maritime issues, but it lacks clarity and specific obligations, thereby leading to legal fragmentation,¹⁷ while the ILBI focuses specifically on plastic pollution, which may create implementation challenges for member states, particularly developing countries. Addressing

¹⁴ UNCLOS, Article 207.

¹⁵ UNCLOS, Article 211.

¹⁶ UNCLOS, Article 207.

¹⁷ E A Kirk and N Popatta nachai, 'Marine plastics: fragmentation, effectiveness and legitimacy in international law-making,' (2018) 27/3 Review of European, Comparative and International Environmental Law, McIntyre, Owen, Addressing Marine Plastic Pollution as a 'Wicked' Problem of Transnational Environmental Governance. (2020) Environmental Liability: Law, Policy and Practice 282-295.

these challenges requires clear delineation of roles and responsibilities, as well as mechanisms to ensure coherence and avoid duplication.

Despite their shared goals, there is a risk of fragmentation between UNCLOS and the ILBI due to overlapping mandates and institutional silos. UNCLOS provides a general framework for marine pollution,¹⁸ while the ILBI introduces specific measures for plastic pollution. Without clear delineation of roles, there is a potential for duplication or conflicting obligations, which could strain resources and create confusion for member states. For example, UNCLOS establishes enforcement mechanisms through its dispute settlement system (Part XV),¹⁹ while the ILBI may develop its own compliance and enforcement mechanisms, leading to inconsistencies in how marine pollution is addressed. Fragmentation is further exacerbated by the lack of formalised coordination mechanisms between UNCLOS bodies, such as the IMO, and the ILBI's governance structure.²⁰ This lack of institutional alignment can result in inefficiencies and missed opportunities for collaboration. Additionally, fragmentation disproportionately affects developing countries, which may lack the capacity to navigate complex and overlapping obligations under multiple regimes.²¹ This can hinder their ability to effectively address plastic pollution and comply with UNCLOS provisions, ultimately undermining the effectiveness of both regimes.

2. Waste Management

The Basel Convention, adopted in 1989, primarily regulates the transboundary movement of hazardous waste to prevent illegal dumping in vulnerable countries.²² Recent amendments to the Basel Convention have expanded its scope to include plastic waste, recognising the significant environmental harm caused by the growing trade in poorly managed plastics. The

¹⁸ Nguyen, L. N. 'Expanding the Environmental Regulatory Scope of UNCLOS Through the Rule of Reference: Potentials and Limits' (2022), *Ocean Development & International Law*. <https://doi.org/10.1080/00908320.2021.2011509>. Accessed 3 February 2025.

¹⁹ UNCLOS, Article 7.

²⁰ Supra note 6.

²¹ Gupta J, Vegelin C, Pouw N. Lessons learnt from international environmental agreements for the Stockholm + 50 Conference: celebrating 20 Years of *INEA* (2022). Int Environ Agreement. <https://link.springer.com/article/10.1007/s10784-022-09570-x>, accessed 5 February 2025.

²² [Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal](https://enb.iisd.org/articles/basel-convention#:~:text=It%20was%20adopted%20in%201989,and%20gave%20prior%20written%20consent)(adopted 22 March 1989, entered into force 5 May 1992)1673 UNTS 123 [IISD Earth Negotiations Bulletin](https://enb.iisd.org/articles/basel-convention#:~:text=It%20was%20adopted%20in%201989,and%20gave%20prior%20written%20consent). <https://enb.iisd.org/articles/basel-convention#:~:text=It%20was%20adopted%20in%201989,and%20gave%20prior%20written%20consent>

Plastic Waste Amendments (2019)²³ introduced stricter controls on the international movement of contaminated and non-recyclable plastics, requiring PIC from receiving countries.²⁴ This was a critical step in curbing the illegal export of plastic waste from developed to developing nations. The ILBI builds on these efforts by focusing on reducing plastic waste generation at its source and promoting environmentally sound waste management practices.

However, the interaction between the Basel Convention and the ILBI also presents challenges. While the Basel Convention addresses the downstream management of plastic waste, it does not directly tackle the upstream aspects, such as plastic production, chemical composition, and consumption patterns.²⁵ This regulatory gap leaves much of the plastic life cycle unaddressed. Articles 3, 4 and 6 of the INC 5.1 aim to complement the Basel Convention by creating binding commitments to reduce plastic production and encouraging circular economy principles.²⁶ Effective coordination and goal alignment, such as the ILBI setting targets for reducing plastic production while the Basel Convention updates its guidelines on plastic waste, are required to prevent duplication and ensure that both regimes work together seamlessly.

3. Hazardous Chemical Management

The ILBI and the Rotterdam Convention share common goals in addressing hazardous substances, creating opportunities for synergy in global governance. One of the key areas of alignment is the regulation of hazardous chemicals in plastics. The Rotterdam Convention already applies the Prior Informed Consent (PIC) procedure to certain harmful chemicals,²⁷ and integrating this mechanism into the ILBI could strengthen oversight of hazardous plastic additives. This would enhance transparency in the plastic trade, ensuring that importing countries have the necessary information to regulate toxic plastics effectively. Moreover, the

²³ Benson Emily. The Basel Convention: From Hazardous Waste to Plastic Pollution (2017). <https://www.csis.org/analysis/basel-convention-hazardous-waste-plastic-pollution.com>. Accessed 5 February 2025.

²⁴ *Ibid.*

²⁵ <https://www.basel.int/Portals/4/Basel%20Convention/docs/plastic%20waste/UNEP-FAO-CHW-RC-POPS-PUB-GlobalGovernancePlastics-2023.pdf>

²⁶ UNEP Doc No UNEP/PP/INC.4/3, 28 December 2023, “Revised draft text of the international legally binding instrument on plastic pollution, including in the marine environment”.

²⁷ Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (adopted 10 September 1998, entered into force 24 February 2004) 2244 UNTS 39973. <https://www.pic.int/TheConvention/Overview/TextoftheConvention/tabid/1048/language/en-US/Default.aspx>.

ILBI's lifecycle approach²⁸ to plastics could complement the Rotterdam Convention's trade-focused framework, by addressing not only hazardous chemicals in plastics but also their production and disposal, thereby creating a more comprehensive regulatory system. Strengthening collaboration between the two regimes could also lead to improved monitoring and data-sharing, helping to prevent the illegal dumping of plastic waste in countries with weak environmental controls.

Despite these potential synergies, there are significant challenges in the interaction between the two regimes. The Rotterdam Convention primarily focuses on chemicals, whereas the ILBI seeks to regulate plastics from production to disposal, creating a divergence in scope that may result in regulatory gaps. Furthermore, the listing process under the Rotterdam Convention has been slow and politically contested, with industry influence often preventing the inclusion of hazardous substances.²⁹ If the ILBI aligns too closely with the Rotterdam Convention's chemical regulation process, it risks facing similar bureaucratic and political hurdles that could weaken its effectiveness.

Another challenge lies in enforcement; the Rotterdam Convention has struggled with compliance, as many countries lack the capacity to implement its requirements effectively.³⁰ If the ILBI inherits these weak enforcement mechanisms, it may fail to prevent the continued circulation of toxic plastics in global markets. Additionally, regulatory fragmentation could emerge if the two treaties develop separate, inconsistent rules, making compliance difficult for countries and businesses while creating loopholes for hazardous plastics to persist in trade. Addressing these challenges requires strong institutional coordination, independent scientific oversight, and robust enforcement mechanisms to ensure that both treaties contribute effectively to reducing plastic pollution and hazardous chemical exposure.

The Stockholm Convention, on the other hand, focuses on eliminating or restricting the production and use of persistent organic pollutants (POPs) highly toxic substances that remain

²⁸ Supra note 10.

²⁹ Kinniburgh, F., Selin, H., Selin, N.E. and Schreurs, M. "When private governance impedes multilateralism: The case of international pesticide governance (2023). *Regulation & Governance*", 17: 437-439. <https://doi.org/10.1111/rego.12463>. Accessed 5 February 2025.

³⁰ A regional approach to the implementation of the Rotterdam Convention. <https://www.fao.org/4/i0407e/I0407E03.htm>

in the environment for long periods.³¹ Many plastics contain POPs, such as flame retardants and plasticisers, which pose significant risks to human health and ecosystems.³² The Stockholm Convention has taken steps to regulate certain chemicals used in plastics,³³ but it does not comprehensively cover all hazardous additives in plastic products. The ILBI's interaction with the Stockholm Convention is crucial for addressing these chemical risks more holistically. By identifying and targeting harmful chemicals in plastics, the ILBI can expand the scope of existing regulations under the Stockholm Convention and protect both human health and biodiversity.

4. Trade and Economic Agreements

Regime interaction between the ILBI and trade and economic frameworks, such as the World Trade Organisation (WTO) and various Regional Trade Agreements (RTAs), highlights the intersection of environmental protection and international trade. This relationship is critical, as the ILBI's measures such as restrictions on plastic products and waste,³⁴ could impact global trade patterns, presenting both opportunities and challenges.³⁵ Ensuring coherence between trade and environmental regimes is essential to avoid conflicts, while promoting sustainable trade practices that align with global environmental goals.

The WTO, established to regulate international trade and promote economic cooperation, plays a key role in shaping how countries implement environmental regulations with trade implications. WTO agreements, such as the General Agreement on Tariffs and Trade (GATT), and the Agreement on Technical Barriers to Trade (TBT Agreement), are particularly relevant to the ILBI.³⁶ GATT's Article XI generally prohibits quantitative restrictions on imports and exports, which could conflict with treaty provisions banning certain types of plastic products

³¹ [Stockholm Convention](https://www.unido.org/our-focus-safeguarding-environment-implementation-multilateral-environmental-agreements/stockholm-convention) on Persistent Organic Pollutants (POPs) [UNIDO](https://www.unido.org/). (adopted 22 May 2001, entered into force 17 May 2004). <https://www.unido.org/our-focus-safeguarding-environment-implementation-multilateral-environmental-agreements/stockholm-convention>

³² Campanale C, Massarelli C, Savino I, Locaputo V, Uricchio VF. A Detailed Review Study on Potential Effects of Microplastics and Additives of Concern on Human Health (2020). *Int J Environ Res Public Health*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC7068600/>. Accessed 5 February 2025.

³³ Stockholm convention on persistent organic pollutants (POPS). Text and annexes revised in 2019. Annex A.

³⁵ Why Trade Matters in the Plastic–Pollution Treaty Negotiations | International Institute for Sustainable Development. [https://www.iisd.org/articles/explainer/why-trade-matters-plastic-pollution-treaty-negotiations#:~:text=Making%20ILBI's%20measures%20consistent%20with,25%20to%20December%201%2C%202024](https://www.iisd.org/articles/explainer/why-trade-matters-plastic-pollution-treaty-negotiations#:~:text=Making%20ILBI's%20measures%20consistent%20with,25%20to%20December%201%2C%202024.). Accessed 5 February 2025.

³⁶ Espa Ilaria. Restrictions to Transboundary Movements of Plastics and WTO Law: A Policy Brief (2021) SNIS Policy Brief.

or regulating the movement of plastic waste.³⁷ However, GATT Article XX allows for exceptions to these rules when necessary to protect human, animal, or plant life and the environment, provided that the measures are not applied in a discriminatory or arbitrary manner.³⁸

Provisions within the IBLI emphasise that measures taken to combat plastic pollution must avoid creating trade distortions and must not constitute arbitrary or unjustifiable discrimination or disguised trade restrictions.³⁹ This language reflects key principles found in WTO agreements, particularly GATT Article XX, which allows for environmental measures if they do not violate the principles of fair and non-discriminatory trade.

By incorporating these clauses, the ILBI aims to prevent conflicts with existing trade regimes. Ensuring that national-level measures—such as bans on certain plastics products, restrictions on the transboundary movement of plastic waste, or plastic-related trade policies—do not act as disguised protectionist tools is essential for maintaining free and fair trade and consistency with WTO obligations.

RTAs add another layer of complexity to the ILBI's regime interaction. Many RTAs, particularly newer-generation agreements, include environmental chapters that promote sustainable development and environmental protection.⁴⁰ For example, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP),⁴¹ and the EU-Mercosur Trade Agreement,⁴² contain provisions encouraging parties to adopt measures for pollution control and waste management. The ILBI can benefit from aligning its objectives with these RTAs, creating synergies that enhance both trade and environmental outcomes.

However, challenges remain in ensuring consistency across multiple agreements. Unlike the WTO, which provides a centralised system for trade rules, RTAs often vary in scope and content, leading to fragmented environmental obligations. Countries may find themselves subject to different environmental standards under multiple agreements, complicating

³⁷ *Ibid*, Page 4.

³⁸ *Ibid*, Page 4.

³⁹ Zero Draft, Article 1 bis(f), Article 3(8), Article 5(4)

⁴⁰ IUCN WCEL Briefing 5 of 6 for Plastics Treaty INC-2 Treaty Regime Interactions version 2. <https://iucn.org/resources/information-brief/iucn-wcel-briefing-5-6-plastics-treaty-inc-2-treaty-regime-interactions>

⁴¹ Comprehensive and Progressive Agreement for Trans-Pacific Partnership, Article 20.6.

⁴² Trade aspects of the EU-Mercosur Association Agreement. Study Requested by the INTA committee. [Trade aspects of the EU-Mercosur Association Agreement](#)

compliance and enforcement.⁴³ This fragmentation could hinder the effective implementation of the ILBI unless a coordinated approach is adopted.

The ILBI's interaction with trade-related intellectual property rights is also significant. The development of new technologies for plastic alternatives and recycling may involve patents and intellectual property protections under the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).⁴⁴ The treaty must strike a balance between protecting innovation and ensuring the accessibility of these technologies, especially for developing countries. Developed countries can support developing nations by facilitating access to patented technologies related to plastic alternatives and recycling. This can be achieved through mechanisms such as licensing agreements, partnerships, or patent pools, ensuring that intellectual property rights (IPR) protection does not hinder the dissemination of essential technologies. Another critical area is the regulation of plastic trade flows. The ILBI seeks to reduce the production and export of non-recyclable plastics, which will directly affect global markets. While these measures aim to prevent environmental harm, they may also disrupt global supply chains, particularly for countries that rely on plastics exports.⁴⁵ Coordinating with trade regimes can help minimise these economic impacts while supporting a just transition to sustainable practices, especially in regions heavily dependent on the plastic industry.

5. Biodiversity and Ecosystem Protection

The Convention on Biological Diversity (CBD) plays a pivotal role in global efforts to protect biodiversity and ensure the sustainable use of natural resources. Plastic pollution has become a growing threat to ecosystems and biodiversity, particularly in marine environments where it disrupts habitats and endangers countless species.⁴⁶ The ILBI requires enhanced interaction with the CBD by addressing the direct and indirect impacts of plastic pollution on biodiversity

⁴³ Gaál Norbert. Global Trade Fragmentation. An EU Perspective (2023), European Commission Directorate-General for Economic and Financial Affairs Directorate-General for Trade. https://economy-finance.ec.europa.eu/system/files/2023-10/eb075_en.pdf. Accessed on 4 February 2025.

⁴⁴ Aziz Andrew. How Will a Global Plastic Treaty Impact Trade? (2024) IISD. <https://www.iisd.org/articles/explainer/how-will-global-plastics-treaty-impact-trade>. Accessed on 4 February 2025.

⁴⁵ *Ibid.*

⁴⁶ [Plastic pollution - resource | IUCN](https://iucn.org/resources/issues-brief/plastic-pollution). <https://iucn.org/resources/issues-brief/plastic-pollution>.

and promoting ecosystem resilience. This regime interaction is essential for aligning the treaty's objectives with broader global biodiversity targets.

The CBD's objectives focus on conserving biological diversity, promoting the sustainable use of its components, and ensuring the fair and equitable sharing of benefits arising from genetic resources.⁴⁷ These goals intersect with the ILBI's efforts to reduce the environmental harms caused by plastics. Plastic pollution has devastating effects on marine and terrestrial ecosystems, entangling wildlife, disrupting critical habitats such as coral reefs and mangroves, while microplastics contaminate food chains.⁴⁸ By regulating plastic production, consumption, and disposal, the ILBI can contribute to the CBD's mandate to protect ecosystems and species from degradation.

The ILBI also seeks to align with key targets from the Kunming-Montreal Global Biodiversity Framework, such as Target 7, which focuses on reducing pollution, including plastics, to levels not harmful to biodiversity, and Target 14, which emphasises restoring ecosystems affected by plastic pollution.⁴⁹ By integrating these targets, the ILBI ensures that plastic reduction measures contribute directly to global biodiversity conservation efforts.

Despite these efforts, challenges remain. Fragmentation between biodiversity and plastic governance regimes can lead to inconsistent implementation and conflicting priorities at the national level.⁵⁰ Additionally, the treaty must balance biodiversity protection with the demands of a circular economy, ensuring that solutions such as bio-based plastics do not inadvertently harm ecosystems through increased land use or habitat loss.⁵¹

The interaction between these regimes also highlights the importance of ecosystem-based approaches to environmental protection. The CBD advocates for integrated management practices that consider the complex relationships between ecosystems and human activities.⁵² The ILBI can enhance this approach by promoting nature-based solutions such as restoring

⁴⁷ Glowka, L. A Guide to the Convention on Biological Diversity (1994). *Union Internationale pour la Conservation de la Nature et de ses Ressources*. <https://portals.iucn.org/library/efiles/documents/EPLP-no.030.pdf>. Accessed 4 February 2025.

⁴⁸ Supra Note 46.

⁴⁹ Siegwart Karine, A ILBI and biodiversity: converging or conflicting regimes? IUCN's proposal for a specific article on "Biodiversity Aspects" in the future Plastics Treaty. World Commission on Environmental Law. [iucn-wcel-brief-inc-global-plastics-treaty-and-biodiversity-march-2024.pdf](https://www.wcel-brief-inc-global-plastics-treaty-and-biodiversity-march-2024.pdf). Accessed 5 February 2025.

⁵⁰ *Ibid*.

⁵¹ *Ibid*

⁵² Supra Note 46.

wetlands and mangroves to prevent plastic waste from entering marine environments. These solutions not only reduce plastic pollution but also strengthen the natural resilience of ecosystems, helping them adapt to other environmental stresses such as climate change.

However, the interaction between the ILBI and the CBD is not without challenges. One of the major issues is the lack of harmonised monitoring and reporting systems. While the CBD encourages parties to monitor biodiversity loss and its causes, plastic pollution data remains fragmented and inconsistent across countries.⁵³ The absence of standardised indicators for measuring the impact of plastics on biodiversity complicates the assessment of progress under both the CBD and the ILBI. Ensuring data integration and coordinated reporting mechanisms will be essential for bridging this gap and improving global biodiversity monitoring.

Another challenge is the potential for conflicting priorities between regimes. While the ILBI focuses on reducing plastic production and managing waste, the CBD's priorities include conservation, restoration, and the sustainable use of natural resources. Aligning these objectives requires careful coordination to ensure that plastic reduction strategies do not inadvertently affect resource-dependent communities or conservation efforts.

B. Shortcomings of the ILBI regarding regime interaction

One of the most significant shortcomings of the Chair's Text is the fragmented governance landscape it enters. Multiple international agreements such as the UNCLOS, the Basel Convention on Hazardous Waste, and MARPOL already address aspects of plastic pollution.⁵⁴ However, these regimes operate with differing scopes and mandates, leading to regulatory overlap and inconsistent implementation.

For instance, UNCLOS provides a broad framework for addressing marine pollution, while MARPOL specifically targets pollution from ships. The Basel Convention regulates the transboundary movement of hazardous plastic waste, but it does not cover upstream aspects such as plastic production and consumption. The ILBI must interact with all these regimes, but the lack of a clear mechanism to harmonize their obligations leaves states vulnerable to conflicting requirements. This fragmentation can dilute enforcement efforts and create

⁵³ Supra Note 49.

⁵⁴ Supra Note 6.

confusion about which obligations take precedence, especially for states with limited capacity to comply with multiple regimes.

The absence of a formal coordination body or institutional framework to manage regime interaction is a critical weakness of the Chair's Text. A robust example for the coordination system is the Basel, Rotterdam, and Stockholm (BRS) Conventions which operate under a joint secretariat, established to enhance coordination between the three treaties governing hazardous chemicals and waste.⁵⁵ This coordination mechanism facilitates joint decision-making, synchronised reporting, and shared institutional support, ensuring that measures addressing plastic waste, chemical additives, and hazardous waste trade are aligned across multiple legal instruments.⁵⁶ Unlike other international environmental agreements, such as the Montreal Protocol, which have established coordination mechanisms with relevant international bodies, the Chair's Text lacks a structured approach to collaborate with existing institutions like the IMO or the CBD.⁵⁷ Without proper coordination, there is a risk of duplicative reporting obligations and fragmented monitoring systems. This creates inefficiencies and places an undue administrative burden on states, particularly developing countries that already face resource constraints.⁵⁸ Effective coordination is essential to ensure that the treaty builds on existing efforts rather than replicating them, but this remains an unresolved challenge.

Furthermore, the Chair's Text has weak integration with trade and economic frameworks, particularly the WTO. The ILBI's measures to restrict certain plastic products or control the transboundary movement of plastic waste could conflict with WTO rules on free trade and non-discrimination.⁵⁹ While Article XX of GATT provides exceptions for environmental measures, these exceptions must meet strict criteria to avoid being challenged at the WTO's Dispute Settlement Body. The treaty fails to provide clear guidelines on how trade-related measures will align with WTO rules, increasing the risk of trade disputes.

⁵⁵ The Basel, Rotterdam, and Stockholm Conventions. <https://www.brsmeas.org/Default.aspx?tabid=2690>

⁵⁶ Contribution of the Secretariat of the Basel, Rotterdam, and Stockholm Conventions to the second part of the Secretary General's comprehensive report on oceans and the law of the sea. Report by UNEP. https://www.un.org/depts/los/general_assembly/contributions_2014_2/BRS_Conventions.pdf

⁵⁷ Maes, Thomas, Nicole Wienrich, Laura Weiland, and Emily Cowan, 'A Little Less Conversation: How Existing Governance Can Strengthen the Future Global Plastics Treaty (2023)'. *Cambridge Prisms: Plastics*. <https://plasticheal.dk/media/5wimh2vj/a-little-less-conversation-how-existing-governance-can-strengthen-the-future-global-plastics-treaty.pdf>. Accessed 5 February 2025.

⁵⁸ *Ibid.*

⁵⁹ Supra Note 36.

Another significant shortcoming of the Chair's Text is the absence of robust enforcement and compliance mechanisms. Existing regimes such as UNCLOS provide access to the International Tribunal for the Law of the Sea (ITLOS),⁶⁰ and the Basel Convention has a Compliance Committee to monitor state obligations. However, the Chair's Text does not offer a similarly strong framework for enforcement or dispute resolution. This weakens the treaty's ability to hold states accountable for failing to meet their commitments. Another weakness is the lack of an integrated monitoring and data-sharing system between the ILBI and other environmental agreements.⁶¹ While the Chair's Text introduces new reporting obligations, it does not adequately align them with existing monitoring frameworks under the CBD, UNCLOS, or the Basel Convention. This fragmentation in data collection and reporting makes it difficult to assess the cumulative impact of plastic pollution and track progress across multiple regimes. Standardising indicators and promoting data integration would be essential for effective monitoring, but this remains an unresolved challenge.

C. Recommendations

- A key recommendation is the creation of a formal coordination body or 'clustering' to facilitate interaction between the ILBI and other international regimes, such as UNCLOS, MARPOL, the Basel Convention, and the CBD. This body would act as a platform for communication and collaboration, ensuring that obligations across different agreements are harmonised.⁶² Regular inter-agency meetings and joint reporting systems could reduce administrative burdens and improve consistency in implementation.
- The treaty must strengthen its interaction with trade frameworks, particularly the WTO, to ensure that its measures comply with international trade rules. Guidelines on trade-related measures should be developed, outlining how restrictions on plastics align with the environmental exceptions set out in Article XX of GATT. Engaging with RTAs that

⁶⁰ Supra Note 6.

⁶¹ March A, Tsouza A, Nieminen L, Winton S, Arora H, Shejuti S-M, Walker TR and Fletcher S. National Action Plans: Effectiveness and requirements for the Global Plastics Treaty (2024). Cambridge Prisms: Plastics. <https://www.cambridge.org/core/journals/cambridge-prisms-plastics/article/national-action-plans-effectiveness-and-requirements-for-the-global-plastics-treaty/E1948E36233B8E0BBB6CE1CCB80061C9>. Accessed 5 February 2025.

⁶² Oberthür, S. Clustering of Multilateral Environmental Agreements: Potentials and Limitations (2002). International Environmental Agreements: Politics, Law and Economics. <https://link.springer.com/article/10.1023/A:1021364902607>. Accessed 5 February 2025.

have environmental chapters can help promote the ILBI's objectives in global markets.⁶³ Additionally, the ILBI should support green trade policies by promoting eco-friendly alternatives to plastics and encouraging the development of sustainable supply chains. Capacity-building initiatives could assist developing countries in adopting plastic alternatives without undermining their competitiveness in global markets.

- A robust compliance and enforcement mechanism is essential for ensuring that states adhere to the treaty's commitments. The ILBI should establish an independent compliance committee, like the Basel Convention, to monitor progress and address non-compliance. Dispute resolution mechanisms should be aligned with existing frameworks under UNCLOS and ITLOS.⁶⁴ The ILBI could introduce sanctions and incentives, offering financial and technical support to states that meet their commitments while imposing penalties on persistent violators.

⁶³ Supra Note 35.

⁶⁴ Supra note 6.

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Chapter 8

Financial Mechanism

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Introduction

Financial support is inevitably required in order to meet environmental challenges. The adaptation finance needed to implement domestic adaptation priorities is estimated at US\$387 billion per year up to 2030 and the modelled costs of adaptation in developing countries are estimated at US\$215 billion per year this decade, but the international public adaptation finance flows to developing countries was only US\$27.7 billion in 2022.¹

Existing environmental financial mechanisms provide the basis for related capital flow. The Global Environment Facility (GEF) was established in 1992 on the eve of the Rio Earth Summit, and the projects it finances cover a wide range of areas, such as biodiversity, pollution and climate.² It has already formed an effective process for the operation of international environmental funds, and the fund is familiar to the governments and civil societies of all countries.

Finance for addressing plastic pollution needs attention. Negotiation of the new global plastics treaty is continuing, and financing is critical. While discussions show growing interest in the need for financial mechanisms, questions remain. What can we learn from previous mechanisms? How can the international community make the best of the current mechanism while making sure new claims for financial support are considered?

A. From INC-1 to INC-4

From INC-1 to INC-4, negotiations on the financial mechanism progressively deepened and crystallised. During INC-1, negotiations focused mainly on the need for a financial mechanism, including financial support to enable effective reporting, the need to maximise financial

¹ UNEP, Adaptation Gap Report 2024 (November 7, 2024) <https://www.unep.org/resources/adaptation-gap-report-2024> (accessed April 6, 2025).

² UNEP, Global Environment Facility (November 18, 2024) <https://www.unep.org/about-un-environment/funding-and-partnerships/global-environment-facility> (accessed April 6, 2025).

resources, the participation of developing countries in the INC process, the purpose of the financial mechanism, and the origin of the financial support.³ By INC-4, parties talked about the core obligation of the new multilateral fund, the dedication of private sector, alignment of financial flows, adjustments to the governance structure of the financial flows and the governance structure of the financial mechanism.⁴

B. Negotiating Consensus

Throughout, the negotiations have centred on supporting developing countries to implement plastic pollution control measures.

From INC-1 to INC-4, delegates have gradually paid more attention to the common but differentiated responsibilities principle. At INC-1, although “prioritising countries that are most in need” was mentioned, there was no clear consensus on how to prioritise. However, by INC-4, the delegates were focused on the financial support to developing countries, prioritising developing countries in the allocation of funds and their right to monitor the use of funds. At the same time, as the discussions progressed, the focus of the negotiations gradually shifted from simply providing financial support to ensuring it is sustainable and predictable, with an emphasis on transparency and efficiency of fund utilisation.⁵

C. Focus of Disputes

1. Source of funding

Regarding the source of funding, there has been considerable disagreement among the stakeholders. Developed countries prefer funding through existing international financial institutions, while developing countries in favour of a new dedicated multilateral fund to support their financial needs.⁶

2. Equity in the distribution of funds

³ UNEP Doc No. UNEP/PP/INC.1/14, Means of implementation, including capacity-building, technical assistance and finance (2 March 2022).

⁴ UNEP Doc No. UNEP/PP/INC.4/5 (6 May 2024).

⁵ *Ibid.*

⁶ UNEP Doc No. UNEP/PP/INC.3/5 (1 December 2023).

During INC-2 to INC-4, the issue of equity in the distribution of funds triggered debate. Some countries, especially SIDS, were concerned that the allocation of funds might favour certain countries or regions over others that also needed support. The Coordinating Body on the Seas of East Asia (COBSEA) made claims for “appropriate technical and financial assistance”. Latin American and Caribbean States stated that landlocked developing countries also need special aid. Developing countries were divided into different groups and all hoped to get more investment.⁷

3. INC-5 The Chair’s Text⁸

The Chair’s Text was developed to synthesise the views of all parties and further refine the specifics of the financial mechanism, embodying the mechanism in a legal text. It covers diversification of funding sources, transparency and predictability of fund allocation, and special support for developing countries, achieving a shift from initial conceptual discussions to concrete implementation details.

4. Structure and Governance

The Chair’s Text provides that the financial mechanism under the ILBI will be operated by the COP, with a special focus on additional resources, including domestic finance, bilateral, regional, and multilateral entities, and the private sector. According to the Chair’s Text, the financial mechanism might include a new and dedicated fund and a fund within the existing financial arrangement, with the aim of providing grant or concessional funding to developing countries, particularly Less Developed Countries (LDCs) and SIDS.⁹

D. Funding and Allocation

The ILBI plans to support the preparation and implementation of national action plans and the preparation of national reports, providing funding to enable activities, including technical and technological support and agreed incremental costs, as well as other activities

⁷ UNEP Doc No. UNEP/PP/INC.2/5 (7 July 2023).

⁸ UNEP INC Chair’s Text (1 December 2024) [hereinafter Chair’s Text].

⁹ *Ibis*. Article 11 Financial [Resources And] Mechanism.

that further the objectives. It is also suggested that capacity building, technology, and technical assistance should be country-driven, based on nationally determined needs, mutual interest and priorities.¹⁰

Compare to the Montreal Protocol

The Montreal Protocol offers a valuable precedent as an effective financial mechanism. Under this framework, a Multilateral Fund was established and managed by an Executive Committee to provide financial assistance to developing countries. Based on an indicative list of categories of incremental costs developed by the Parties, it provides financial and technical cooperation and technology transfer to support developing countries, including capacity building, technology transfer and renewal, as well as the preparation and implementation of National Ozone Action Plans on a grant or concessional basis to meet national commitments.¹¹

The financial mechanisms under the Montreal Protocol and the Chair's Text both provide financial support to developing countries. However, due to the differences in the objectives, the scope of activities, and the stage of process, the Montreal Protocol's mechanism is more comprehensive and effective, for reasons set out in this section.

E. Montreal Protocol – Similarities and Differences

1. Structure and Governance

The multilateral fund under the Montreal Protocol is managed by an Executive Committee with equal representation from developed and developing countries. Its financial mechanism includes provisions for a dedicated fund primarily offering grant or concessional funding.

The Montreal Protocol does not explicitly mention equal representation, neither does the Chair's Text. However, to align with the goal of focusing on LDCs and SIDS, balancing representation remains a challenge in effectively achieving this objective. Unlike the Montreal Protocol, the ILBI aims to incorporate existing funding arrangements such as the

¹⁰ *Ibid.*

¹¹ Montreal Protocol on Substances that Deplete the Ozone Layer (with annex). Concluded at Montreal on 16 September 1987, Doc No. 26369

GEF, a global fund that would contribute into its financial mechanism. However, this issue remains unresolved after multiple rounds of negotiations.

2. Funding and Allocation

Under the Montreal Protocol, funding is primarily used for the phase-out of ozone-depleting substances. It focuses on country-oriented studies and other technical co-operation, including technical cooperation facilitation, information distribution, and the holding of workshops, and training sessions. The fund also supports the facilitation and monitoring of multilateral, regional and bilateral co-operation, incremental costs, and the financing of its own secretarial services.

However, the ILBI in this regard is ambiguous. Parties agreed that the financial mechanism should cover the expenses of activities, national action plans, and the preparation of national reports. However, when it comes to capacity building, the Chair's Text neither describes the types of activities it might support nor sets any standards.

F. Pros and Cons of the Chair's Text

1. Advantages

Enhanced Liquidity and Capital Access

The Chair's Text set a robust regulatory framework to reduce investment risk, foster cross border cooperation and enhance transparency. Parties' obligations to align financial flows with objectives, mobilise finance from different sectors, and distribute financial resources are clearly defined in the text.¹² This could facilitate the movement of financial resources across markets, enabling countries and businesses to secure capital for expanding and innovating in plastics management and recycling infrastructure, ultimately contributing to business growth and economic development.

¹² For example, "Parties, in particular those with the financial capacity to do so and high levels of [mismanaged plastic waste,] plastic production, or polymer production, are expected to contribute to the Mechanism, on a voluntary basis from their public funding".

Incentivising Sustainable Practices

The text states that financial resources will be provided for technology development, capacity building and fair transitions. Public investment can induce a more proactive attitude among beneficiary firms towards innovation activities.¹³ Therefore, with more financial support for technology development, it is possible that there will be more innovative approaches to promote the widespread adoption of circular practices.

Encouraging Global Collaboration

Applying the principle of common but differentiated responsibilities, the ILBI aligns the interests of nations, businesses, and environmental stakeholders. Financial incentives linked to national plans and special focus on SIDS and LDCs have the potential to create a common commitment to finding and implementing effective solutions to reduce plastic pollution, fostering the sharing of best practices, technology, as well as expertise on a global scale, and thus, encouraging global collaboration.

Clear Targets and Monitoring

By providing financial support for the reporting mechanism, progress towards the goal of reducing plastic pollution and other agreed outcomes is likely to be better managed, and the transparency and accountability of financial support will be enhanced.

Recommendations

2. Structure

Other than the ILBI itself, the operating organ of the newly established fund should provide for adequate representation from LDCs and SIDGs, while also considering the interests of other developing and developed countries, in order to ensure that the financial support goes to the places most vulnerable.

¹³ Hall, B.H. and Maffioli, A., 'Evaluating the impact of technology development funds in emerging economies: Evidence from Latin America' (2008) IDEAS Working Paper Series from RePEc. <https://www.nber.org/papers/w13835> accessed 06 April 2025.

3. Funding

The financial mechanism outlined in the text suggests a mix of public and private funding. Introducing the private sector into the mechanism is necessary but also risky. A study on climate issues shows that private sector projects can go against country ownership, transparency, and civil society participation, and private climate financing based on loans and equity might add to the debt burden of developing countries, destabilise financial markets, and further increase the wealth gap.¹⁴ Excessive dependency on the private sector might lead to dangerous consequences for financial health. Comprehensive regulation would need to be elaborated.

Working with existing international financing institutions, like the GEF, while establishing a new fund, could lead to a broader systemic change in order to meet the requirements of accessible, adequate, predictable and sustainable financial support, as called for by representatives. With the intention to facilitate the transition from an outside funding mechanism to this new dedicated financing mechanism in order to fill the gaps, there should be a time limit for implementation of this hybrid system.

To improve cooperation among parties and enhance the efficiency of fund allocation and utilisation, clearer guidelines for fund allocation should be adopted.

Based on CBDR and recognition that LDCs and SIDs are entitled to receive more financial support, the financial mechanism should broadly empower different stakeholders in the process of project implementation, and there should be a monitoring system on the financial flows to ensure the process is transparent and efficient.

¹⁴ Kalinowski, T., 'The Green Climate Fund and private sector climate finance in the Global South' (2023) 24(3) Climate Policy, 281–296. <https://doi-org.ucc.idm.oclc.org/10.1080/14693062.2023.2276857>.

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Chapter 9

Monitoring, Compliance and Reporting

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A. Compliance

Plastic pollution has significant impacts on nature,¹ which led to discussions for a future ILBI for reducing the harmful impacts of plastic production. In order to reduce these impacts, it is essential to establish an effective compliance system within the framework of ILBI. Indeed, it is posited, regarding environmental law compliance, that if treaty compliance cannot be achieved, the intended achievements would merely remain a utopian ideal.² Compliance is defined as “actor behaviour that conforms to a treaty’s explicit rules.”³ Under this definition, it can be said that compliance does not always mean effectiveness or implementation.⁴ A state's decision to comply can be influenced by multiple factors, including legitimate social purpose, self-interest, and adverse public opinion.⁵ Conversely, non-compliance can stem from perceived benefits or limitations in state capacities.⁶

The term "compliance" exhibits a significant and inextricable relationship with the term "enforcement."⁷

¹ See, in general, WWF, Tekman M., Walther B.A., Peter C., Gotow L. & Bergmann M. “Impacts of Plastic Pollution in the Oceans on Marine Species, Biodiversity and Ecosystem,” (2022).

² Peter H. Sand, “Institution-building to Assist Compliance with International Environmental Law: Perspectives,” in *Making Law Work: Environmental Compliance and Sustainable Development* vol.1, (Durwood Zaelke, Donald Kaniaru & Eva Kruzikova ed. Cameron May Publishing,2007), at p. 209.

³ Ronald B. Mitchell, “Compliance Theory: An Overview,” in *Making Law Work: Environmental Compliance and Sustainable Development* vol.1, (Durwood Zaelke, Donald Kaniaru & Eva Kruzikova ed. Cameron May Publishing,2007), at p. 84.

⁴ Beth Simmons, “Compliance with International Agreements,” 75 *Annual Review of Political Science* 1 (1998), at p. 3.

⁵ *Ibid.* at p. 86.

⁶ *Ibid.* at p. 89.

⁷ Carolyn Abbot, *Enforcing Pollution Control Regulation: Strengthening Sanctions and Improving Deterrence*, (Hart Publishing, 2009), at p. 7.

According to the general theory of compliance with legal regulations, it is predominantly posited that enforcement must be economically advantageous, which implies that the averted social losses must exceed the combined costs of compliance and enforcement, a theory known as the cost-effectiveness approach.

In this sense, a future ILBI should also consider the costs of the possible compliance or monitoring mechanisms. However, considering the nature of environmental damages (which may not always seem financially valuable), there are certain alternative suggestions for building enforcement, which aim for a high level of compliance.⁸ One potential recommendation in this regard is to promote research on the economic implications of plastic pollution, which may motivate nations to implement more costly interventions.⁹

In general terms, two main enforcement approaches can be observed: *i.e.* the deterrence and (non-)compliance approaches.¹⁰ While the deterrence approach considers society as comprising of "bad apples" who are likely to violate regulations since it is more profit-efficient, the non-compliance approach views society as consisting of "good apples" who act in good faith.¹¹ In considering the nature of international environmental protection, it can be argued that the non-compliance approach may be more effective, as it is motivated not only by financial criteria but also by other factors.¹² This is crucial for comprehending the nature of international obligations which necessitate both international cooperation and national compliance.¹³ To establish effective non-compliance mechanisms, a cooperative approach should be adopted, with legal sanctions supporting regulators in fostering collaboration.¹⁴ Enforcement mechanisms can indeed be cooperative or competitive in nature.¹⁵ Nevertheless, integrating both approaches may create a more effective compliance

⁸ *Ibid.*

⁹ WWF, Wijnand D., Erin T. B., Jean-Charles Guinchard & Nour Ahmed, "Plastics: The Costs to Society the Environment and the Economy," (2021).

¹⁰ Abbot, *supra* n. 7, at p. 39.

¹¹ *Ibid.*

¹² *Ibid.* at p.42.

¹³ Ina Tessnow-von Wysocki & Philippe Le Billon, "Plastics at Sea: Treaty Design for a Global Solution to Marine Plastic Pollution," 100 Environmental Science and Policy 94, (2019) at p.102.

¹⁴ Abbot, *supra* n.7, at p. 42.

¹⁵ Roila Mavrouli, "Management and Enforcement Theories for Compliance with the Rule of Law," European Journal of Risk Regulation (2024), at p. 4.

system.¹⁶ Within the European Union's compliance framework, it is clear that both collaborative and competitive enforcement strategies are seen. These strategies encompass preventive capacity building, monitoring, dialogue, and, as a final measure, punitive sanctions.¹⁷

To establish an effective compliance mechanism, states should implement measures within a global reporting and monitoring framework for the production, collection, and management of plastic waste.¹⁸ The ILBI should be self-enforcing to ensure effective implementation. Even though this may seem like a rather complex aim, there may be certain steps to ensure a certain level of self-enforcement. Accordingly, the ILBI can set national regulatory and measurement requirements while promoting international cooperation.¹⁹ It is also advisable to implement proportionate non-compliance measures that are commensurate with the protection achieved (cost-effective).²⁰ This can be achieved by harmonising cooperative and competitive enforcement mechanisms as described above.

1. Key Issues

Compliance should be considered an umbrella term encompassing other important aspects such as monitoring, enforcement, reporting, and review mechanisms. The key issues on compliance can be enumerated as compliance systems, cooperative approach enforcement mechanisms, capacity building, financial assistance review mechanisms, effectiveness, and related factors which will be evaluated in following sections.

2. Recommendations

The effectiveness of an international treaty can be assessed using three main criteria: outputs, outcomes, and impacts.²¹ While effectiveness is an abstract concept, the ILBI must ensure concrete efforts to implement obligations. These efforts should induce a shift in

¹⁶ *Ibid.* at p. 5.

¹⁷ *Ibid.* at p.6.

¹⁸ WWF Report, *supra* n.9.

¹⁹ Wysocki & Le Billon, *Plastics at sea*, *supra* n.13, at p. 102.

²⁰ *Ibid.*

²¹ Oran R. Young, "Hitting the Mark: Why are Some International Environmental Agreements More Successful than Others?" in *Making Law Work: Environmental Compliance and Sustainable Development* vol.1, (Durwood Zaelke, Donald Kaniaru & Eva Kruzikova ed. Cameron May Publishing,2007), at p. 189.

current state behaviour and create a measurable environmental impact.²² Recently, the approach for achieving effectiveness has shifted toward modifying the behaviour of the parties primarily responsible for the impact intended to be avoided.²³

The RZD also differentiates between compliance and effectiveness by implementing certain additional measures to ensure efficiency. A sense of this distinction can be found in Chapter 4, Article 4 of the RZD, which gives the governing body authority to monitor the progress of compliance: “The governing body shall [entrust a subsidiary body to] periodically evaluate [in a comprehensive and facilitative manner,] the [implementation][progress][effectiveness] of [this][the] instrument...²⁴” Ensuring compliance may require the relationship between different type of bodies under a treaty regime, such as between the Conference of Parties, Secretariat or other administrative structures, and even sometimes international NGOs.²⁵ Establishing a centralized monitoring body, supported by auxiliary institutions such as technical and scientific committees with the authority to issue recommendations and sanctions, represents the primary approach.²⁶ As will also be evaluated in the monitoring section, the ILBI should include these main approaches by a governing body, as already mentioned in the RZD.

State capacity is one of the most significant factors influencing compliance. This is why international treaties often incorporate capacity-building measures within their framework. In this context, certain recently ratified treaties will tend to differentiate between state responsibilities and to include provisions regarding assistance for treaty compliance.²⁷ Suggestions in this regard include technology transfer and data sharing,²⁸ as well as

²² *Ibid.*

²³ *Ibid.* at p.190.

²⁴ UN Environment Programme (UNEP), *Revised draft text of the international legally binding instrument on plastic pollution, including in the marine environment*, (Dec. 28, 2023), (Hereinafter: Zero Draft) Chapter 4 Art. 4/b. The term Instrument is defined in Art. 5 op. 2 of the first part of the Zero Draft as: “This *instrument* addresses the full life cycle of plastics, based on comprehensive regulations and collaborative measures based on a hierarchy between avoidance, reduction, reuse, recycling, and elimination.”

²⁵ Sandrine Maljean-Dubois & Vanessa Richard, “Mechanisms for Monitoring and Implementing International Environmental Protection Agreements” halshs-00426417 (2004), at p.17.

²⁶ *Id.*

²⁷ Sand, *supra* n. 2, at p.214; UN Framework Convention on Climate Change, 1771 UNTS 107 (May 9, 1992), Art. 4- c, g, h (hereinafter: Climate Change Convention); Convention on Biological Diversity, 1760 UNTS 79, (June 9, 1992), Art. 20.

²⁸ Climate Change Convention, Art.4; Agreement under the UN Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction, UNGA, Doc. A/CONF.232/2023/4, (June 19, 2023), Art 40, Art.41, [Hereinafter: BBNJ Agreement].

technical assistance²⁹ and specialised training programmes and guidelines.³⁰ Similarly, MEAs often incorporate various measures to assist developing states in fulfilling their obligations. A key example is the provision of financial aid³¹ and multilateral funds³² to support compliance in developing countries.³³ Such financial mechanisms are seen as strategies to achieve collective interests rather than acts of charity,³⁴ and can be seen as a legal application of the common but differentiated responsibility principle aiming to build a more equitable compliance system among developed and developing states.³⁵ Notably, during the RZD negotiations, proposals included the establishment of a multilateral fund similar to that established under the Montreal Protocol.³⁶

Another key issue that impacts the effectiveness of treaties is that of controversy surrounding their interpretation. To address this, the ILBI should grant the governing body the authority to interpret the ILBI in the event of a dispute.³⁷

Another suggestion for ensuring compliance with the ILBI would be to incorporate regime flexibility as a key feature. One of the primary challenges regarding international treaties is that of the difficulty in implementing amendments after their adoption. This may be a problem for MEAs due to rapidly changing conditions. In order to avoid this problem, it is suggested that international treaties should have periodic review and assessment mechanisms in order to adjust certain measures and obligations to new concerns.³⁸ This does not imply that the wording in the regulations should be altered; flexibility can be achieved through reinterpretation or escape clauses that may facilitate new adjudications

²⁹ Sand, *supra* n. 2, at p.214.

³⁰ *Ibid.* at p. 215; Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1673 UNTS 57, (March 22, 1989).

³¹ Convention concerning the Protection of the World Cultural and Natural Heritage, 1037 UNTS 151, (Dec. 16, 1972).

³² Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, London Amendments, 1598 UNTS 469, (June 29, 1990).

³³ Sand, *supra* n.2, at p.216.

³⁴ *Ibid.* at p.217.

³⁵ See, Principles Section.

³⁶ Hunar Arora, Antaya March, Laura Nieminen, Sayda-Mebrabin Shejuti & Tony R. Walker, “Defining an Effective “Plastics Treaty” Through National Perspectives and Visions During Early Negotiations,” 2 Cambridge Prisms: Plastics, (2024), at p. 13.

³⁷ Sand, *supra* n.2, at p.212.

³⁸ *Ibid.* at p. 218.

or guidance to ease compliance.³⁹ A significant example is the quota system under the Montreal Protocol, which permits exceptions from the trade ban.⁴⁰

In conclusion, the ILBI should establish peer-reviewed compliance assessments. These can then be enforced by institutions, which can provide targeted support for disadvantaged parties and develop a framework to accommodate future regime modifications.⁴¹ The ILBI will not work based on unmonitored, voluntary compliance alone, as there are potentially both ‘good’ and ‘bad apples’ in any broadly applicable international binding legal agreement.

B. Monitoring

Monitoring serves as a crucial instrument for providing insights into the true circularity of plastic production.⁴²

Building a strong monitoring mechanism can help to develop cooperation and exchange of information among states as well as assuring transparency.

Currently, international environmental agreements such as the CBD may incorporate specialised institutions to monitor the compliance of participating states. The establishment of a monitoring body is crucial for an international treaty.⁴³ Such bodies should conduct empirical assessments and reflect the practices of the participating parties.⁴⁴ Such a

³⁹ *Ibid.* at p. 219.

⁴⁰ *Ibid.*

⁴¹ *Ibid.* at p.225.

⁴² “New EEA Monitoring Tool Reviews Progress on Plastics Circularity in Europe,” 2024 <https://www.eea.europa.eu/en/newsroom/news/new-eea-monitoring-tool-on-plastics-circularity> (accessed: 23.01.25).

⁴³ Montreal Protocol, Art. 11-12.

⁴⁴ Kal Raustiala, “Reporting and Review Institutions in 10 Multilateral Environmental Agreements,” in *Making Law Work: Environmental Compliance and Sustainable Development* vol.1, (Durwood Zaelke, Donald Kaniaru & Eva Kruzikova ed. Cameron May Publishing,2007), at p. 227.

monitoring mechanism is also likely to encourage reluctant participants to comply by highlighting the compliance of other parties.⁴⁵

1. Key Issues

The key aspects of global environmental monitoring for ILBI include monitoring criteria (such as environmental impacts, human health impacts, and economic sustainability), monitoring stages, transparency, financial mechanisms, and national reporting, which will be evaluated in the following section with relevant recommendations.

2. Recommendations

To establish an effective monitoring system, it is essential to address specific questions under the ILBI, such as the parameters to be monitored and common methodologies for measurement.⁴⁶ Draft provisions were introduced in RZD Art. 4 by directly obliging states and international organisations to build a national assessment and monitoring system along the following lines:

- a) Establishment of baseline information on the types and volumes of existing plastic pollution in the environment;
- b) Periodic collection of data and information on the types and levels of plastic pollution in the environment;
- c) Modelling to understand the movement of plastics in air, soil, water, and ecosystems;
- d) The effects of plastic pollution on the environment.⁴⁷

A primary recommendation is to establish an independent, fully functioning monitoring body with the necessary expertise. While doing so, it should be noted that effective financial mechanisms within the ILBI will also affect the independence of the monitoring body.⁴⁸ This body should regularly (rather than periodically) initiate both implementation

⁴⁵ *Ibid.* at p. 232.

⁴⁶ Environmental Investigation Agency, “Convention on Plastic Treaty: Essential Elements: Reporting and Monitoring,” (2022) at p.5.

⁴⁷ Zero Draft Chapter 4 Art. 4/a.

⁴⁸ See Financial Mechanisms Section.

and compliance reviews. NGOs and international organisations could play a crucial role in ensuring an effective review process.⁴⁹ The Environmental Investigation Agency (environmental NGO) proposes that monitoring should focus on addressing the environmental and human health impacts resulting from "plastic pollution in the biosphere, bioindicator species or exposure risks and threshold."⁵⁰

When developing monitoring systems, states should ensure they have the domestic technological infrastructure to monitor the plastic lifecycle processes. To achieve this objective, each state should establish a national financial fund for these enhancements.

The ILBI should clearly state the monitoring method that will be applied. Different types of monitoring methods are suggested by the literature, such as implementation review, compliance review, and effectiveness review.⁵¹ Among these options, certain procedures are proposed in the application of compliance review, which focus exclusively on adherence to treaty commitments.⁵² Some argue that compliance review institutions may serve as a practical alternative to less effective dispute resolution procedures.⁵³ While implementation and compliance reviews are predominantly used in practice, there is limited evidence of treaties employing the effectiveness review, which primarily focuses on the outcomes of the parties' actions.⁵⁴ In this context, the RZD focuses on all three aspects: implementation, effectiveness, and compliance reviews. One of the important aspects of Article 4 is the recommendation for the establishment of an Effectiveness Evaluation and Review Committee under the governing body to achieve effectiveness for the ILBI.⁵⁵ Any evaluation by the governing body under Article 4 is to focus on the following information: scientific, environmental, technical, financial, and economic information.⁵⁶

It is important to establish an independent committee under the ILBI with comprehensive authority on monitoring. The RZD gives authority to the governing body to establish review mechanisms which: "[shall consist of a committee that] shall be [facilitative][non-punitive]

⁴⁹ *Ibid.*

⁵⁰ Environmental Investigation Agency, *supra* n.46, at p. 4.

⁵¹ See in general, Raustiala, *Reporting and Review*, *supra* n. 44, at p. 232.

⁵² *Ibid.* at p. 233.

⁵³ *Ibid.*

⁵⁴ *Ibid.* at p. 236.

⁵⁵ Zero Draft Chapter 4 Art. 4/b OP1 and OP2 Alt.

⁵⁶ Zero Draft Chapter 4 Art. 4/b (3).

[non-adversarial][expert-based] in nature [and [shall] pay particular attention to the respective national capabilities and circumstances of Parties.”⁵⁷ In framing the RZD, it was decided that the committee shall not act as a dispute settlement body and shall respect the national sovereignty of states.⁵⁸ In addition, the guidelines or recommendations accepted by this committee will be “facilitative, non-intrusive, non-adversarial, and non-punitive.”⁵⁹ While it is appropriate to mention the establishment of a committee within the scope of the ILBI, the stipulation that certain issues will be determined by this committee through future guidelines may introduce uncertainty. In this context, it would be helpful to clarify legal issues such as the committee's composition, competence, and the legal status of its decisions within the ILBI framework. Additionally, like the BBNJ Agreement adopted under the Convention on Biological Diversity,⁶⁰ a scientific committee could be established under the governing body to assess the best available research on plastics.⁶¹

It is also vital to establish a global database to better understand the challenges and outcomes. Specific recommendations include requiring states to create their own database for effective monitoring, in coordination with the global database established under the governing body.⁶² The ILBI also mentions a financial and technical aid system for developing countries to facilitate compliance with monitoring regulations.⁶³

Finally, all parties should be required to develop a NAP in accordance with the ILBI and guidelines established by the committee or governing body. In order to effectively implement the monitoring mechanisms, the RZD introduces certain obligations on establishing a national plan, especially to effectively build a national compliance system: “Each Party [shall][is encouraged to] develop and implement a national [action] plan [through domestic consultations, with binding actions, including quantitative and measurable targets, where appropriate] to [pursue its nationally determined objective of ending plastic pollution][fulfil its obligations] under this instrument...”⁶⁴ The main

⁵⁷ Zero Draft Chapter 4 Art. 2/1.

⁵⁸ Zero Draft Chapter 4 Art. 2/1, OP2 bis.

⁵⁹ Zero Draft Chapter 4 Art. 2/1, OP3 alt.

⁶⁰ Agreement under the UN Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction (adopted 19 June 2023) C.N.203. 2023.TREATIES-XXI.10.

⁶¹ BBNJ Agreement Art.21/5-6-7; WWF Report, *supra* n. 18.

⁶² Zero Draft Art. 13 OP3 bis 2.

⁶³ Zero Draft Art. 13 OP3 bis 3.

⁶⁴ Zero Draft Chapter 4 Art. 1.

discussion around these options centres on whether this NAP will be voluntary or compulsory. Several key questions pertaining to the NAP, such as the submission timeline and its basic requirements, remain unaddressed in the RZD. Instead, these matters were delegated to the authority of the committee that will be established under the governing body.⁶⁵ The NAP should be based on the best available data⁶⁶ and outline the parties' intention for fulfilling their obligations.⁶⁷ As a monitoring mechanism, the RZD also stipulates that states are obligated to inform the governing body regarding their NAP within one year of the ILBI's entry into force.⁶⁸ As the regulation stands, non-state actors are not excluded from the NAP process. Any exclusion would be a potential drawback, since non-state actors play a crucial role in fulfilling obligations under MEAs.

C. Reporting

Collection of data is a crucial part of the monitoring process.

To facilitate effective international reporting, states should integrate national systems for data collection encompassing the entire lifecycle from production to disposal.

The primary data types that should be collected in order to determine the lifecycle are predominantly identified as data pertaining to production and consumption, trade, waste management, environmental leakage, and related factors.⁶⁹ Reporting mechanisms can assume various forms based on regulatory frameworks, including voluntary or compulsory systems, annual or triennial report systems, state-based data collection systems, and data

⁶⁵ IISDO, 36 Earth Negotiations Bulletin a Reporting Service for Environment and Development Negotiations, "Summary of the First Session of the Fifth Session of the INC to Develop an International Legally Binding Instrument on Plastic Pollution," (Dec. 3, 2024), at p.6.

⁶⁶ Zero Draft Chapter 4 Art. 1, OP1 Chapeau bis.

⁶⁷ Zero Draft Chapter 4 Art. 1, OP1 Alt2.

⁶⁸ Zero Draft Chapter 4 Art. 1/2.

⁶⁹ "Strengthening the Transparency and Accountability of the Global Plastics Treaty through Data: the Plastics Data Checklist," <https://www.sustainabledevelopmentreform.org/strengthening-the-transparency-and-accountability-of-the-global-plastics-treaty-through-data-the-plastics-data-checklist/> (accessed: 26 January 2025).

collection systems involving both state and non-state actors.⁷⁰ In the current system, most MEAs rely on the national reporting systems of states.⁷¹

Building a national reporting system serves several purposes, with the primary objectives being to assess the environment, understand the situation in each country, and evaluate the potential outcomes and effectiveness of the ILBI.⁷²

The process that follows the receipt of reports is also crucial to the monitoring process. While some international treaty regimes use reports to detect general behavioural changes, others conduct individual assessments.⁷³ This general application of review is known as 'systems for implementation review.'⁷⁴ A key example of this process is the Montreal Protocol, which established an independent implementation committee with the authority to administer non-compliance procedures.⁷⁵

1. Key Issues

The principal components of reporting can be outlined as follows: a national reporting system, requisite data, a digital data system, reporting period, reception and review protocol, a global database, and the involvement of non-state actors which will be evaluated in the following section in more detail.

2. Recommendations

Key data recommended for collection under the ILBI include both economic and environmental criteria. Economic data should cover production, consumption, reduction, and recycling rates.⁷⁶ Environmental data should focus on toxic substances, health impacts, ecosystem, and marine pollution impacts, among others. Additionally, report data should be transparent and open access.

⁷⁰ Raustiala, *Reporting and Review*, *supra* n.44 at pp. 229-230.

⁷¹ Climate Change Convention, Annex 1.

⁷² Environmental Investigation Agency, *supra* n.46, at p. 3.

⁷³ Raustiala, *Reporting and Review*, *supra* n.44 at pp. 230-231.

⁷⁴ *Ibid.*

⁷⁵ *Ibid.*

⁷⁶ “Monitoring Plastic Pollution: Key Elements for a Science-based Framework for a Global Plastics Treaty,” <https://council.science/blog/monitoring-plastic-pollution-key-elements-for-a-science-based-framework-for-a-global-plastics-treaty/> (accessed: 23.01.25).

A primary recommendation is to establish an effective data collection system. Given the global scope and impact of plastic pollution,⁷⁷ it is essential to obtain comprehensive data across all stages of the lifecycle, encompassing production, utilisation, trade, disposal, and waste management processes.⁷⁸ For the ILBI to have a global impact, it is essential to have monitoring mechanisms with the authority to maintain databases that hold states accountable in the case of non-compliance.⁷⁹ In the RZD, there are several options for data collection under the monitoring system. Firstly, in the RZD, states are obliged to establish an effective data collection and national monitoring system for the plastic lifecycle:

“Each Party [shall][is mandated to] [monitor] [and][establish a national monitoring system to], [track] [and publish and update, in a transparent manner relevant and readily available information][, to the possible extent,] the types and [volumes][[quantities] of its production, imports, and exports of chemicals [and polymers] [used][employed] in the [production][manufacturing] of [plastic polymers,] [plastics][[and] plastic products], [and][including] regulated plastic [products][items] [across][throughout] their life cycle].”⁸⁰

While doing so, there are also certain draft regulations on the establishment of “*digital tracking, [traceability,] marking and [eco-]labelling requirements [including] [consistent with provisions of the World Trade Organisation’s Agreement on Technical Barriers to Trade] ...*”⁸¹ highlighting the importance of the interaction between ILBI and international trade. There are, indeed, important intersections between MEAs and international trade.⁸²

The limited capacities of the developing states in terms of data collection should be considered. During the deliberations, there was a discussion regarding whether the limited

⁷⁷ “Understanding Plastic Pollution and its Impact on Lives”, (2023), <https://www.un.org/africarenewal/magazine/may-2023/understanding-plastic-pollution-and-its-impact-lives#:~:text=Unlike%20other%20materials%2C%20plastic%20does,can%20cause%20serious%20health%20impacts>. (accessed: 04.02.25).

⁷⁸ Monitoring, *supra* n. 76.

⁷⁹ Wysocki & Le Billon, *Plastics at sea*, *supra* n.13, at p. 102.

⁸⁰ Zero Draft Art. 13/2, option 1.

⁸¹ Zero Draft Art. 13/1(c), option 1.

⁸² See. UN Food and Agriculture Organization, “The Impact of the Regional Trade Agreement on the Environment” <https://openknowledge.fao.org/server/api/core/bitstreams/0c7cb6df-c416-4397-b999-bf7bca819b17/content/state-of-agricultural-commodity-markets/2022/trade-agreements-impact-environment.html#:~:text=The%20effects%20of%20environment%2Drelated,net%20annual%20changes%20in%20deforestation>. (accessed: 01.03.25).

capacity of developing states would impact their reporting obligations.⁸³ The RZD contains a reference to reporting, which is characterised as either compulsory⁸⁴ or voluntary⁸⁵ in nature. In the second option, in addition to information on “measures taken to implement the provisions of this instrument and on the effectiveness of such measures,” data on “possible challenges upon the availability of and its accessibility to financial and technical support” is also recommended to be included.⁸⁶ Considering the essential contribution of the reporting mechanisms to compliance, it is imperative to establish a compulsory reporting system. However, it can be argued that due to the limited capacities of developing states, certain capacity-building mechanisms can be implemented in order to build an effective implementation system.

The ILBI requires the collection of data necessary for the national reporting mechanism. There is extensive discourse regarding the types of data in continuing international discussions. It is stated that in order to build an effective reporting system, data must be collected on the following: “resin production and consumption, recycled plastic production and consumption, plastic use, plastic waste management, plastic waste trade, sea-based sources of plastic pollution, primary microplastics and additives.”⁸⁷ Possible data types that may be requested under the RZD include “statistical data on types and volumes of its production, imports, and exports of plastic polymers and products,” and “numerical information on production and consumption, leakage along the value chain, waste generation, collection of waste, recycling (quantity/rates), collection of discharged plastics into the marine and other environments, policy targets and goals reflecting the global goal, detailed roadmap towards the realisation of the targets and goals, and their achievements.”⁸⁸ It should be noted that data collection should encompass the full lifecycle of plastics in order to better highlight the full scope of the ILBI.⁸⁹

Additionally, non-state actors must be considered in any future data collection system. This approach is crucial for assisting certain developing states in their reporting and data

⁸³ IISDO Report, *supra* n.65, at p. 6.

⁸⁴ Zero Draft Chapter 4 Art. 3/1.

⁸⁵ Zero Draft Chapter 4 Art. 3/1, OP1 bis.

⁸⁶ Zero Draft Chapter 4 Art. 3/1, OP1 bis.

⁸⁷ Environmental Investigation Agency, *supra* n.46, at p. 3.

⁸⁸ Zero Draft Chapter 4 Art. 3/2.

⁸⁹ See the Scope Section.

collection processes, as well as for identifying deficiencies in the national reporting systems.⁹⁰ Although the RZD did not explicitly address the involvement of non-state actors during the reporting period, one of the options encourages contributions from international organisations such as the "World Trade Organisation (WTO), World Customs Organisation (WCO), World Health Organisation (WHO), and the International Labour Organisation (ILO)."⁹¹

Conclusion

Monitoring, compliance, and reporting mechanisms for the ILBI on plastic pollution are crucial. It is important for effective compliance that a balanced approach combining cooperative and competitive enforcement strategies is recommended. It is important to establish a self-enforcing framework with national regulatory requirements, implement proportionate non-compliance measures, and create a governing body to monitor progress. One of the key aspects of self-compliance is the monitoring mechanism of environmental impacts, human health, and economic sustainability across the plastic lifecycle. Effective monitoring cannot be achieved without a NAP or national database. Reporting systems encompass the thorough gathering of data related to different facets of plastic production, usage, and waste management. While doing so, it is essential to involve non-state actors in the data collection and reporting process.

⁹⁰ See also the Regime Interaction Section.

⁹¹ Zero Draft Chapter 4 Art. 3/4, OP4 bis.

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