

An International Legal Framework for Marine Plastics Pollution

Time for a Change to Regulate the Lifecycle of Plastics

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4.1 INTRODUCTION

Plastics have become a popular material for use in a wide range of applications due to their characteristics of being safe, durable, inexpensive, and capable of being formed into a great variety of shapes. As a result of the explosion in the use of single-use and disposable plastics, the amount of plastic waste discharged into the oceans has become one of the most pressing environmental issues of our time. More than eight million tonnes of plastic waste are discarded into the oceans every year. And with the ever-increasing global consumption of plastic, research suggests that the oceans could contain, by weight, more plastic than fish by 2050.¹ Indeed, the Covid-19 pandemic has resulted in an additional issue with regard to marine plastics waste. The widespread use of single-use plastic products (e.g., masks and gloves) to provide protection against the spread of this infectious disease has generated and continues to generate millions of tons of plastic waste.²

Marine plastic litter and microplastics have become serious threats to the marine environment.³ For example, marine species are suffering from entanglement, ingestion of plastic chemical substances and destruction of their marine habitats. Microplastics, which are fragments of plastic less than 5 mm in size, raise additional concerns. They cause potential threats not only to marine species but also to human health, via the food chain. The non-degradable nature of plastics and the ability of

¹ Graeme Wearden, 'More plastic than fish in the sea by 2050, says Ellen MacArthur', *The Guardian*, 19 January 2016. Available at: www.theguardian.com/business/2016/jan/19/more-plastic-than-fish-in-the-sea-by-2050-warns-ellen-macarthur (accessed 30 November 2021).

² Ana L. Patrício Silva, Joana C. Prata, Tony R. Walker, Armando C. Duarte, Wei Ouyang, Damià Barceló and Teresa Rocha-Santos, 'Increased Plastic Pollution Due to COVID-19 Pandemic: Challenges and Recommendations' (2021) 405 *Chemical Engineering Journal* 1–9.

³ See, GESAMP, *Proceedings of the GESAMP International Workshop on Assessing the Risks Associated with Plastics and Microplastics in the Marine Environment* (2020), 3–12; UN, *The Second World Ocean Assessment Volume II*, (2021) Chapter 12, 151–183.

plastic waste to travel long distances across the oceans from its origin can also cause a serious issue. The Great Pacific garbage patch is an example of this, as it comprises a floating plastic accumulation far from any point of origin, which is more than 1.6 million square km in size and contains around 80,000 tonnes of plastic.⁴

Whilst a number of treaties and legal instruments deal with marine plastics pollution, nevertheless, millions of tons of marine plastic waste are being discharged into the oceans on a continuous basis. This raises the question whether these regulations are adequate to address the situation, or whether the extent of plastics pollution taking place is due to poor implementation of these existing instruments.⁵ The rule of law, an indispensable foundation for ocean governance, requires both legal certainty in law-making and also effective implementation.⁶ Thus, the problem of marine plastics pollution raises a challenge in terms of maintenance of the rule of law. This chapter will examine how the rule of law could be enhanced in relation to regulation of marine plastics and microplastics pollution. It will provide an overview of the current legal framework that addresses marine plastics and microplastics and analyses what gaps remain within it. Then it will discuss how to enhance the current legal framework to promote the rule of law.

4.2 THE CURRENT LEGAL FRAMEWORK GOVERNING MARINE PLASTIC LITTER AND MICROPLASTICS

4.2.1 *Fragmented Nature of International Instruments*

No international treaty has the primary objective of preventing and regulating marine plastics pollution. The United Nations Convention on the Law of the Sea (UNCLOS)⁷ provides an overarching legal framework regulating all activities in the oceans. In addition to a general obligation under Article 192 to protect the marine environment, Article 194 requires States to take all measures to prevent, reduce and control pollution of the marine environment. UNCLOS also regulates specific sources that have caused pollution, such as land-based sources,⁸ dumping⁹ and vessels.¹⁰ However, UNCLOS does not provide detailed regulations on prevention of marine plastic litter and microplastics.

⁴ *National Geographic*, 'Great Pacific Garbage Patch'. Available at: www.nationalgeographic.org/encyclopedia/great-pacific-garbage-patch/ (accessed 30 November 2021).

⁵ Karen Raubenheimer, Alistair McIlgorm and Nilüfer Oral, 'Towards an Improved International Framework to Govern the Life Cycle of Plastics' (2018) 27 *Review of European, Comparative & International Environmental Law* 210 at 216.

⁶ UNGA Resolution 67/1, 'Declaration of the high-level meeting of the general assembly on the rule of law at the national and international level', A/RES/67/1 (2012).

⁷ Montego Bay, 10 December 1982, in force 16 November 1994, 1833 UNTS 397.

⁸ UNCLOS (n. 7), Art. 207.

⁹ UNCLOS (n. 7), Art. 210.

¹⁰ UNCLOS (n. 7), Art. 211.

A wide range of legal instruments address issues relating to marine plastics. First, various treaties regulate different sources of marine plastics. For land-based sources, which are responsible for 80 per cent of the plastics disposed of in the oceans, UNCLOS remains the only binding treaty that regulates them in these terms.¹¹ Although Article 207 of UNCLOS is of particular importance, it allows States wide discretion in regulating land-based pollution to reconcile national economic interests and protection of the marine environment from land-based sources.¹² The Global Programme of Action for Protection of the Marine Environment from Land-based Activities (GPA), which is not legally binding, provides guidance on taking action to prevent land-based sources of pollution. In 2012, UNEP introduced the ‘Honolulu Strategy: a Global Framework for Prevention and Management of Marine Debris’ to support implementation of the GPA by a set of goals and strategies.

Sea-based sources that generate marine plastic litter and microplastics by fishing, dumping and shipping should also be regulated. The United Nations Agreement for Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA)¹³ regulates abandoned, lost or otherwise discarded fishing gear, which forms a significant component of sea-based sources of marine plastics pollution. It requires States to minimise waste, discards and catch by lost or abandoned gear through taking appropriate measures.¹⁴ In addition, the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter¹⁵ and its 1996 Protocol¹⁶ regulates and strengthens the obligation to prohibit dumping under Article 210 of UNCLOS. The International Convention for the Prevention of Pollution from Ships (MARPOL),¹⁷ which regulates ship-based sources of pollution, is linked to the obligation under Article 211 of UNCLOS. In particular, Annex

¹¹ Nilufer Oral, ‘From the Plastics Revolution to the Marine Plastics Crisis: A Patchwork of International Law’, in Richard Barnes and Ronán Long (eds.), *Frontiers in International Environmental Law: Oceans and Climate Challenges: Essays in Honour of David Freestone* (Leiden: Brill 2021), 288.

¹² Yoshifumi Tanaka, ‘Regulation of Land-Based Marine Pollution in International Law: A Comparative Analysis between Global and Regional Legal Frameworks’ (2006) 66 *ZaōRV* 535 at 547–548.

¹³ New York, 4 August 1995, in force 11 December 2001, 2167 UNTS 88.

¹⁴ UNFSA, *ibid.*, Art. 5(f).

¹⁵ Washington/Moscow/London/Mexico City, adopted 29 December 1972, in force 30 August 1975, 1046 UNTS 120.

¹⁶ 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (as amended in 2006).

¹⁷ International Convention for the Prevention of Pollution from Ships, London, 2 November 1973, 1340 UNTS 184, as Amended by the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships of 1973, 17 February 1978, 1340 UNTS 61.

V on the prevention of pollution by garbage from ships prohibits all kinds of discharges into the sea, including plastics. Such plastic wastes include 'synthetic ropes, synthetic fishing nets, plastic garbage bags and incinerator ashes from plastic products'.¹⁸

Second, treaties regulating the impact of marine plastics on biodiversity and species include the Convention on Biological Diversity (CBD)¹⁹ and the Convention on the Conservation of Migratory Species of Wild Animals (CMS).²⁰ Each conference of parties has adopted a series of decisions relating to the management of marine debris. These decisions are non-legally binding, but they contribute to identifying knowledge gaps regarding the impacts of marine plastics on biodiversity and to developing best practices that States can apply.²¹

Third, with regard to hazardous wastes, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention)²² and the Stockholm Convention on Persistent Organic Pollutants (Stockholm Convention)²³ should be considered. The Basel Convention requires States to reduce hazardous waste generation, undertake environmentally sound management of hazardous wastes and restrict transboundary movements of hazardous wastes.²⁴ In 2019, the COP to the Basel Convention adopted a decision on the plastic waste amendment, which is notable progress in regulation of marine plastic waste.²⁵ The amendment has expanded the scope of 'hazardous waste' (Annex VIII) and 'other waste' (Annex II) so that most plastic wastes are subject to the Basel Convention. The amendment entered into force on 1 January 2021. Norway, which initially proposed the amendment, explains that the amendment will result in 'less marine plastic litter, increased traceability, more control and less illegal dumping of plastic waste'.²⁶ States should minimise generation of plastic waste and manage it in an environmentally sound manner.²⁷ Although the amendment to the Basel Convention expanded the scope to encompass regulation of plastic wastes, it has

¹⁸ MARPOL (n. 17) Annex V, Reg. 1(13).

¹⁹ Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, 1760 UNTS 69.

²⁰ Bonn, 23 June 1979, in force 1 November 1983, 1651 UNTS 333.

²¹ For example, CBD Decision XIII/10 on Addressing impacts of marine debris and anthropogenic underwater noise on marine and coastal biodiversity, CBD/COP/DEC/XIII/10 (2016) and Annex on 'Voluntary practical guidance on preventing and mitigating: the impacts of marine debris on marine and coastal biodiversity and habitats'; CMS Resolution 12.20 on Management of Marine Debris monitoring the effects (2017).

²² Basel, 22 March 1987, in force 5 May 1993, 1673 UNTS 57.

²³ Stockholm, 22 May 2001, in force 17 May 2004, 2256 UNTS 119.

²⁴ Basel Convention (n. 22) Art. 4.

²⁵ Decision BC-14/12: Amendments to Annexes II, VIII and IX to the Basel Convention (n. 22), UNEP/CHW.14/28 (11 May 2019).

²⁶ UNEP/CHW/OEWG.11/INF/36 (9 August 2018).

²⁷ Basel Convention (n. 22), Art. 4(2). Art. 2(8) defines environmentally sound management of hazardous wastes or other wastes as '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'.

been argued that there are still gaps, such as lack of national targets, relating to reducing the quantity of plastic waste in addition to no compliance system.²⁸ The plastic waste amendment does, nevertheless, represent notable progress in regulation of marine plastics pollution.²⁹ Indeed, the Stockholm Convention regulates plastics containing or adsorbing persistent organic pollutants that pose a hazard to marine ecosystems and humans.

Moreover, a regional legal framework provides an additional layer of regulation of marine plastic pollution. UNCLOS highlights the importance of regional cooperation in regulating pollution from land-based sources, which account for more than 80 per cent of marine plastic pollution.³⁰ The UNEP Regional Seas Programmes for the protection of the marine environment contribute to facilitating effective implementation of obligations, taking into account regional characteristics. Several regions have adopted regional seas conventions and legally binding instruments on different sources of pollution, such as land-based sources in the form of an annex or protocol.³¹ In addition, some regions have adopted Action Plans on marine litter, recognising marine plastics as the main sources.³² Although Action Plans are usually non-legally binding instruments – except the Regional Plan on Marine Litter Management in the Mediterranean – they demonstrate member States' consensus on regional priorities, develop best practices and promote compliance with international obligations.

However, despite a plethora of international instruments to regulate marine plastics pollution, they provide only limited obligations within their mandate. Not all regions have binding regional instruments relating to marine plastic litter and microplastics. In this regard, it has been argued that the current international instruments are 'rather patchy and subject to prudentially competing norms of behaviour'.³³ Fragmentation undermines legal certainty and reliable application of the laws in question.³⁴ It prevents effective implementation of relevant treaties, so resulting in weakening the rule of law.

²⁸ Karen Raubenheimer and Alistair McIlgorm, 'Can the Basel and Stockholm Conventions Provide a Global Framework to Reduce the Impact of Marine Plastic Litter?' (2018) 96 *Marine Policy* 285 at 286.

²⁹ Sabaa Ahmad Khan, 'Clearly Hazardous, Obscurely Regulated: Lessons from the Basel Convention on Waste Trade' (2020) 114 *American Journal of International Law* 200 at 200–205.

³⁰ UNCLOS, Art. 207.

³¹ See Nilufer Oral, 'Forty Years of the UNEP Regional Seas Programmes: From Past to Future', in Rosemary Rayfuse (ed.), *Research Handbook on International Marine Environmental Law* (Cheltenham: Edward Elgar Publishing 2015), 339–362.

³² For example, the Baltic Sea; East Asian Seas; the Mediterranean; the Northeast Atlantic; Northwest Pacific; the Wider Caribbean Region.

³³ Elizabeth A. Kirk and Naporn Popattanachai, 'Marine Plastics: Fragmentation, Effectiveness and Legitimacy in International Law-Making' (2018) 27 *Review of European, Comparative & International Environmental Law* 222 at 227.

³⁴ Anne Peters, 'The Refinement of International Law: From Fragmentation to Regime Interaction and Politicization' (2017) 15 *International Journal of Constitutional Law* 671 at 679.

4.2.2 Lack of Consideration of the Lifecycle of Plastics

The current legal framework on marine plastics pollution still does not provide a holistic approach governing all the lifecycle phases of plastics. The approach focusing on waste management will not be able to prevent generation of plastics, especially since the use of plastics causes significant negative environmental impacts on the marine environment at each stage of the plastics lifecycle.³⁵ On the other hand, a lifecycle approach of plastics seeks sustainable solutions based on the entire lifecycle of plastics rather than focusing on waste management at the end of their life. Therefore, the need is to take a lifecycle approach. This suggests adopting measures from the early phases of plastic production, such as a sustainable design for reuse, recycling or composting, and reducing the use of harmful substances to the end-of-life phase.³⁶ This is closely linked to a circular economy for plastics, which represents a shift from waste management to resource management.³⁷

There are a few instruments regulating the entire lifecycle of plastics, including upstream activities, such as manufacturing, materials used and product design.³⁸ For example, CBD guidance covers the full lifecycle of plastic pollution, addressing production design, limiting consumption of plastic, promoting recycling and best practices along with the whole of plastics manufacturing. The COP of the Basel Convention discusses updating Technical Guidelines for the Identification and Environmentally Sound Management of Plastic Wastes and for Their Disposal to reflect the entire lifecycle of plastic wastes. It recognises that ‘waste prevention or reduction involves both upstream alterations in product design, including use of alternative materials or technologies ...’.³⁹ It recommends measures at the early stages of plastic production, including adopting a sustainable design for reuse, recycling or composting, and reducing the use of harmful substances.⁴⁰ Extended producer responsibility addressed in the technical guidelines is closely linked to a lifecycle approach as it promotes waste minimisation from product design through to disposal of plastics by allocating a significant responsibility to producers.⁴¹ Although the guidelines do not impose obligations on States, they provide general guidance for developing national waste management strategies and best practices with respect to environmentally sound management of plastic waste.

³⁵ Giulia Carlini and Konstantin Kleine, ‘Advancing the International Regulation of Plastic Pollution beyond the United Nations Environment Assembly Resolution on Marine Litter and Microplastics’ (2018) 27 *Review of European, Comparative & International Environmental Law* 234 at 243.

³⁶ UNEP/CHW.14/INF/29/Add.1; UNEP/POPS/COP.9/INF/28/Add.1 (15 March 2019), para. 12.

³⁷ *Ibid.*

³⁸ CBD/COP/DEC/XIII/10 (2016), (n. 21), para. 8.

³⁹ UNEP/CHW/OEWG.12/INF/14 (15 May 2020), 31, para. 98.

⁴⁰ *Ibid.*, 32, para. 102.

⁴¹ *Ibid.*, 35–36, paras. 117–126.

There is increasing recognition of a lifecycle approach beyond the limit of waste management in tackling marine plastic pollution. It is interesting to note that UNEA Resolution 3/7 on marine plastic litter and microplastics highlights that 'preventive action through waste minimization and environmentally sound waste management' is the highest priority.⁴² However, UNEA Resolution 4/6 moves forward from waste management by underlining 'the importance of more sustainable management of plastics throughout their lifecycle in order to increase sustainable consumption and production patterns . . .'.⁴³ A lifecycle approach will contribute to minimising plastic waste generation, including microplastics, and reduce the use of hazardous substances through the entire plastics lifecycle, so as to closely link to the obligation to prevent under Article 192 of UNCLOS and to increase zero waste at the end-of-life phase of plastic.

4.3 STRENGTHENING THE EXISTING REGULATORY FRAMEWORK

4.3.1 *Cooperation and Coordination between International Instruments*

The fragmentation that exists between regulations remains an obstacle to tackling marine plastic litter and microplastics pollution. Cooperation and coordination between international instruments at the global level would help to reduce unnecessary overlap and duplication between existing regulations and improve implementation of legal instruments, consequently strengthening the rule of law. Since existing instruments often have overlapping objectives in terms of protecting the marine environment from marine plastic pollution within each sectoral interest, they are closely related to each other, and thus should be considered comprehensively and in a coordinated manner. The COP to the Basel Convention is a good example: it adopted guidance in collaboration with the IMO on how to improve the sea–land interface to ensure that waste offloaded from a ship, which previously fell within the scope of MARPOL, is managed in an environmentally sound manner.⁴⁴

In this regard, UNEP, as 'the entity providing secretariat functions' for a number of multilateral environmental agreements, could be used as an overarching body to coordinate different institutions.⁴⁵ UNEP is neither a superior institution with the authority to override decisions adopted by other institutions nor one that could impose legally binding decisions on States.⁴⁶ Yet it could encourage inter-sectoral coordination for the effective development and implementation of regulations

⁴² UNEP/EA.3/Res.7 (30 January 2018), preamble.

⁴³ UNEP/EA.4/Res.6 (28 March 2019), preamble.

⁴⁴ UNEP/CHW.13/18 and UNEP/CHW.13/INF/37/Rev.1 (8 May 2018); UNEP/CHW.13/INF/37 (6 April 2017).

⁴⁵ UNEP/EA.1/INF/8 (30 May 2014), 7–10.

⁴⁶ Elvira Pushkareva, 'United Nations Environment Programme (UNEP)' (2014) *Max Planck Encyclopaedia of International Law*, para. 21.

intended for prevention of marine plastics and microplastics pollution. The coordinating role of UNEP in regulating marine plastic pollution has been recognised in several instruments. For example, Decision 14/13 adopted by COP to the Basel Convention stresses ‘the importance of cooperation and coordination with other international organizations and activities through existing mechanisms, and in particular the multi-stakeholder platform within the UNEP’.⁴⁷

4.3.2 Importance of Regional Cooperation

Regional conventions and action plans adopted in several regions are only applicable within a specific geographical scope. However, these could still serve as a significant platform to develop guidelines and best practices to prevent marine plastic pollution, taking into account its regional characteristics. The transboundary nature of plastic waste also requires a coordinated response across the regions. Inter-regional cooperation contributes to developing harmonised standards and promoting effective implementation at national levels.⁴⁸ The Regional Plan on Marine Litter Management in the Mediterranean could be considered a good example. Although it aims to address marine litter in general, including both land-based and sea-based sources, it is also applicable to marine plastic waste. The binding nature of the plan includes self-determined national targets and timelines that States should meet, which are applicable to marine plastic waste and countervail the weakness of international instruments.⁴⁹ It also requires regional cooperation by establishing institutional cooperation with various relevant regional institutions.⁵⁰

Some action plans expand broad aspects of regulation of marine litter, reflecting the lifecycle of plastic. For example, the action plan in the Mediterranean region states that ‘the entire lifecycle of the product with measures prioritizing the hierarchy of waste management to encourage companies to design products with long durability for reuse, recycling and materials reduction in weight and toxicity’.⁵¹ It includes an extensive producer responsibility strategy aiming at ensuring the entire lifecycle of the product and advocates establishment of manufacturing methodologies in cooperation with the plastics industry.⁵² The OSPAR⁵³ Regional Action Plan

⁴⁷ UNEP/CHW.14/13, Decision BC-14/13 (2019), para. 4.

⁴⁸ Youna Lyons, MeiLin Neo, Amanda Lim, Yuke Ling Tay and Vu Hai Dang, ‘Status of research, legal and policy efforts on marine plastics in ASEAN+3: A gap analysis at the interface of science, law and policy’, COBSEA and NUS, (2020), 348–349. Available at: <https://cil.nus.edu.sg/research/special-projects/#pollution-from-marine-plastics-in-the-seas-of-asean-plus-three> (accessed 30 November 2021), 349.

⁴⁹ The Regional Plan on Marine Litter Management in the Mediterranean (adopted in December 2013; entered into force 8 July 2014), Art. 7 and Annex II.

⁵⁰ *Ibid.*, Art. 18.

⁵¹ *Ibid.*, Art. 9(3)(a).

⁵² *Ibid.*, paras. 3(a) and (g).

⁵³ Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention), Paris, 22 September 1992, in force 25 March 1998, 2354 UNTS 67.

also provides upstream measures, including development of design improvements in sustainable packaging and the phase-out of microplastics in certain industries.⁵⁴ Considering that fishing gear is one of the major sources of marine plastic pollution, OSPAR adopted the Scoping Study on Best Practices for the Design and Recycling of Fishing Gear. This is consistent with a lifecycle approach as it addresses the design and recycling of fishing gear throughout the supply chain.⁵⁵ Thus, these regional action plans indicate that they complement implementation of international obligations taking into account the lifecycle of plastics and promote consistent action at regional and national levels.

Moreover, a monitoring system under the UNEP Regional Seas Programme should be highlighted.⁵⁶ This will contribute to monitoring compliance of international obligations by filling in the gaps in the data on marine plastics, such as the impact of marine plastics on regional seas, on plastic material flow and the quantity of marine plastic waste. It will assist in developing a global monitoring assessment on marine plastic pollution.⁵⁷ Monitoring in regions where the largest number of marine plastics are discarded could also provide a scientific basis for enhancing efficient decision-making and subsequently taking concrete measures.

4.3.3 *Engagement of Multi-Stakeholders*

Multi-stakeholders play a significant role in achieving a lifecycle approach in a circular economy. In particular, the plastics industry can contribute to developing technical standards and certificates relating to, for instance, labelling, recyclability and biodegradability. Development of industry standards relating to production, consumption, recycling and the final treatment of plastic is crucial to promoting implementation at national, regional and global levels. Yet there are regulatory and technical challenges to be faced throughout the lifecycle of plastics. They include substitution with no alternatives (product design phase), chemical release from plastic products (use phase), difficulties of chemical risk assessment and emission of potentially toxic substances (end-of-life phase).⁵⁸

⁵⁴ OSPAR Regional Action Plan (RAP) for Marine Litter (2014–2021).

⁵⁵ OSPAR, OSPAR scoping study on best practices for the design and recycling of fishing gear as a means to reduce quantities of fishing gear found as marine litter in the North-East Atlantic (2020), 68–69.

⁵⁶ UNEP, 'Summary of the analysis of the effectiveness of existing and potential response options and activities on marine litter and microplastics at all levels to determine the contribution in solving the global problem', UNEP/AHEG/4/4 (28 September 2020), 9–12.

⁵⁷ Nicole Wienrich, Laura Weiand and Sebastian Unger, 'Stronger together, the role of regional instruments in strengthening global governance of marine plastic pollution', Institute for Advanced Sustainability Studies (2021), 36–39.

⁵⁸ UNEP/CHW.14/INF/29/Add.1; UNEP/POPS/COP.9/INF/28/Add.1 (15 March 2019) (n. 36), para. 12.

Multi-stakeholder partnerships can fill regulatory gaps and assist in tackling these challenges. For example, the Global Partnership on Marine Litter is a multi-stakeholder partnership to facilitate international cooperation through implementation of the Honolulu Strategy.⁵⁹ It serves as a global platform for multi-stakeholders that can contribute to information sharing, development of new technologies and capacity building. It provides a useful forum for discussing industry standards and developing harmonised best practices to be implemented in collaboration with private actors. Indeed, the Basel Convention recently established a new Partnership on Plastic Waste to promote environmentally sound management of plastic waste in cooperation with multi-stakeholders, including ‘governments, regional and local authorities, Regional Seas Programmes, intergovernmental organizations, private sector, non-governmental organizations and academia’.⁶⁰ These partnerships can contribute to building synergies in collaboration with other international and regional organisations and the private sector.

Moreover, multi-stakeholder partnerships can play a significant role in enhancing the rule of law by providing opportunities for participation in salient law-making. They will be critical in decision-making and implementation of regulations and standards to achieve a circular economy for plastics. In this regard, whilst the international framework governing plastics should move towards a circular economy, cooperation with multi-stakeholders at multiple levels should be enhanced.

4.4 TOWARDS A GLOBAL TREATY ON THE LIFECYCLE OF PLASTICS

The United Nations Environment Assembly has discussed marine plastic litter and microplastics, and has recently adopted a series of resolutions on this matter.⁶¹ In particular, the Assembly also established the ad hoc open-ended expert group on marine litter and microplastics to ‘identify the range of national, regional and international response options, including actions and innovative approaches, and voluntary and *legally binding governance strategies and approaches*’.⁶² Recognising the fragmented nature of the current legal framework on marine plastics pollution, the group suggested possible options for improved global governance to tackle marine plastics pollution. These options broadly include (1) to maintain the status quo which should not be considered; (2) to revise and strengthen the existing

⁵⁹ See, Global Partnership on Marine Litter: Purpose, Function and Organization, Framework Document (2018).

⁶⁰ UNEP/CHW.14/INF/16/Rev.1 (11 June 2019).

⁶¹ UNEP/EA.1/Res.6 (27 June 2014); UNEP/EA.2/Res.11 (4 August 2016); UNEP/EA.3/Res.7 (30 January 2018); UNEP/EA.4/Res.6 (28 March 2019).

⁶² *Ibid.*, UNEP/EA.3/Res.7 (30 January 2018), para. 10(d) (emphasis added).

framework; and (3) to adopt a new treaty that encompasses both enforced and voluntary measures.⁶³

At the fourth meeting of the ad hoc open-ended expert group on marine litter and microplastics in 2020, the third option, adoption of a new treaty on marine plastics, was strongly supported by many delegates.⁶⁴ Various delegates highlighted the key elements that should be considered in a new treaty, such as measurable targets or timelines; global industry standards, such as for design, labelling and recycling; harmonised monitoring procedures; effective compliance mechanisms; and capacity building.⁶⁵ Delegates also declared that these key elements should be developed in alignment with the entire lifecycle of plastics approach.

In 2022, UNGA adopted a resolution to develop a legally binding global instrument on plastic pollution 'based on a comprehensive approach that addresses the full life cycle of plastic' by 2024.⁶⁶ A new treaty could improve legal certainty and increase compliance with international standards, thus enhancing the rule of law. Yet a new treaty would not be a one-stop solution for preventing and managing marine plastics pollution. The legally binding nature of such a treaty and an effective enforcement mechanism for it have yet to be confirmed. Not all countries have expressed their support for adoption of a new treaty. If the States that produce most of the plastics waste were to refuse to ratify a new global treaty, the effectiveness of such a treaty could not be guaranteed. Therefore, whilst a new treaty aims to close the gaps in the existing legal framework, it should be mutually supportive of it, and not undermine obligations under existing treaties.⁶⁷ Adoption of a new treaty should not replace existing legal instruments. Rather, it should reinforce and strengthen existing rules and standards, thereby enhancing the rule of law for oceans.

4.5 CONCLUSION

Marine plastics litter and microplastics pose one of the most serious challenges to the marine environment today. Whilst UNCLOS provides an overarching legal framework to deal with marine plastics issues, which should be supplemented by multiple layers of global and regional regulations, a range of treaties and non-binding instruments regulate marine plastics, with a particular focus on their respective specific mandates. Although the 2019 amendment of the annexes to the

⁶³ UNEP, 'Combating marine plastic litter and microplastics: an assessment of the effectiveness of relevant international, regional and sub regional governance strategies and approaches – a summary for policymakers', UNEP/AHEG/2018/1/INF/3 (20 April 2018).

⁶⁴ UNEP, 'Report on the work of the ad hoc open-ended expert group on marine litter and microplastics at its fourth meeting', UNEP/AHEG/4/7 (18 November 2020), 17–22, paras. 129–160.

⁶⁵ *Ibid.*

⁶⁶ UNEP/EA.5/Res.14 (07 March 2022).

⁶⁷ Raubenheimer et al. 219.

Basel Convention is notable progress in regulating plastic waste, the current legal framework for marine plastics pollution is still criticised as a patchwork of instruments that are fragmented and ineffective in tackling the marine plastics issue. Marine plastics pollution is among those issues that indicate challenges to the rule of law in the sense that the fragmented nature of legal instruments regulating marine plastics and microplastics weakens legal certainty and effective implementation.

Existing legal instruments at global and regional levels remain an important aspect in terms of tackling marine plastics pollution. Cooperation and coordination between sector-specific instruments and between multiple layers of regulations at global, regional and national levels will promote coherent regulations and implementation. Meanwhile, a new paradigm revolving around adopting a lifecycle approach should be considered. This could significantly contribute to prevention of marine plastics litter and microplastics. There is growing awareness regarding issues of pollution ‘upstream’, which requires prevention and minimisation of plastic waste generation at an early stage of plastic production. Although a lifecycle approach has not been fully reflected in the current legal framework, it has recently been increasingly referred to as momentum for sustainable production and consumption. Multi-stakeholder partnership should be promoted in order to facilitate development of initiative solutions throughout the entire lifecycle of plastics from design to recyclability.

Despite urgent and widespread threats to the marine environment from marine plastics pollution, there is no one-stop shop solution. While discussion at the United Nations Environment Assembly clearly expressed support for adoption of a global agreement, development of a new international agreement and strengthening of the current legal framework should be mutually reinforced. The rule of law will be maintained only through comprehensive efforts to enhance legal certainty and to facilitate implementation of legal obligations at global, regional and national levels, taking into account the lifecycle of plastics.