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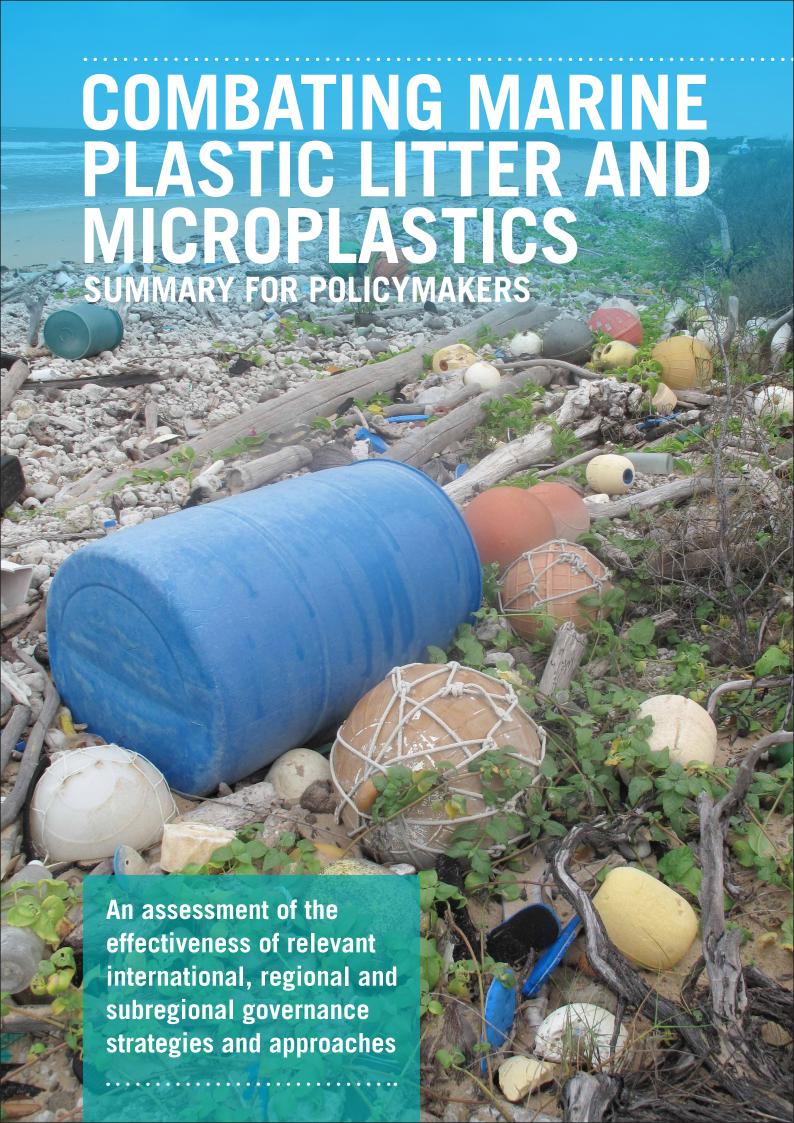
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> Combating Marine Plastic Litter and Microplastics: An Assessment of the effectiveness of relevant international, regional and subregional governance strategies and approaches – Summary for Policy Makers



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# Members of the Advisory Group (Government and Major Groups and Stakeholder nominated experts)

Mark Anthony Browne (Australia), Renate Paumann (Austria), Elchin Mammadov (Azerbaijan), Lieve Jorens (Belgium), Oumarou Kabre (Burkina Faso), Xiangbin Pei (China), François Galgani (France), Michail Papadoyannakis (European Commission), Tuti Hendrawati Mintarish (Indonesia), Nagres Saffar (Iran), Hideshige Takada (Japan), Mohamed Salem Homouda (Libya), Thomas Maes (UK), Ahmed Murthaza (Maldives), Verónica Aguilar Sierra (Mexico), Mareike Erfeling (Netherlands), Lou Hunt (New Zealand), Atle Fretheim (Norway), Maia Sarrouf Willson (Oman), Kyung-Shin Kim (Republic of Korea), Otilia Mihail (Romania), Raymond Geoffrey Johnson (Sierra Leone), Jesús Gago Piñeiro (Spain), Judith Schäli (Switzerland), Terney Kumara (Sri Lanka), Jerker Forsell (Sweden), Pinsak Suraswadi (Thailand), Kerem Noyan (Turkey), Imogen Ingram (Island Sustainability Alliance), Michiel Roscam Abbing (Plastic Soup Foundation), Semia Gharbi (The Abel Granier Association), Davor Vidas (The Fridtjof Nansen Institute).

#### **Peer Reviewers**

Ning LIU (The Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region (NOWPAP)), Marta Ruiz (The Baltic Marine Environment Protection Commission (HELCOM)), R. A. S. Ranawaka (Coast Conservation & Coastal Resource Management Department - Sri Lanka), Lihui AN (Chinese Research Academy of Environmental Sciences), Irina Makarenko (The Commission on the Protection of the Black Sea Against Pollution), Heidrun Frisch-Nwakanma (Convention on the Conservation of Migratory Species of Wild Animals (CMS)), Darius Campbell (Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) Commission), Stefan Micallef (International Maritime Organization (IMO)), Marylène Beau (Secretariat of the Basel, Rotterdam and Stockholm Conventions (BRS)), Christopher Corbin (Secretariat to the Cartagena Convention – Wider Caribbean Region), Joe Appiott (Secretariat of the Convention on Biological Diversity), Ahmed S. M. Khalil (Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA)), Hassan Mohammadi (Regional Organisation for Protection of the Marine Environment (ROPME)), Jacqueline Alvarez (UN Chemicals and Health Branch, Economy Division), Gaetano Leone (UN Environment/Mediterranean Action Plan Coordinating Unit Barcelona Convention Secretariat), Sandra Averous (UN Environment), Aphrodite Smagadi (UN Environment), Jiří Hlaváček (UN Environment), Heidi Savelli (UN Environment), Aaron Vuola (UN Environment), Kanako Hasegawa (UN Environment), Arnold Kreilhuber (UN Environment), Lara Ognibene (UN Environment), Agnes Rube (UN Environment).

#### **Contributors/Authors**

Dr. Karen Raubenheimer (University of Wollongong, Australia), Dr. Nilüfer Oral (Istanbul Bilgi University, Turkey), Prof. Alistair McIlgorm (University of Wollongong, Australia).

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PO Box 30552, 00100 Nairobi, Kenya
Tel +254 20 7621234
publications@unenvironment.org
www.unenvironment.org

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Cover photo: Marine litter is a global transboundary problem that threatens each of the world's oceans.

# COMBATING MARINE PLASTIC LITTER AND MICROPLASTICS

SUMMARY FOR POLICYMAKERS

An assessment of the effectiveness of relevant international, regional and subregional governance strategies and approaches





### **KEY MESSAGES**

This summary provides an overview of the key findings of the assessment "Combating marine plastic litter and microplastics: An assessment of the effectiveness of relevant international, regional and subregional governance strategies and approaches." This assessment was developed in response to the resolution on Marine Plastic Litter and Microplastic<sup>1</sup> adopted by the second session of the UN Environment Assembly and seeks to outline gaps and propose options for addressing these gaps for consideration of the Third Session of the UN Environment Assembly. The assessments reviewed 18 international instruments as well as 36 regional instruments (Section 2).2

The assessment identified existing gaps (Sections 2 & 3) and concluded that current governance strategies and approaches provide a fragmented approach that does not adequately address marine plastic litter and microplastics. This includes limitations in scope and mandate, broad and indirect application to the issue and variations in strategies and approaches incorporated in binding and/or voluntary instruments. (Refer to Fig. 3 and the Annex

- 1 Paragraph 21 UNEP/EA.2/Res. 11.
- 2 This excludes guidelines. Other international and regional instruments have been considered within the context of combating marine plastic litter and microplastics in other sections but not assessed for their effectiveness in this regard.

for summaries of the gaps identified). When looking forward, a progressive holistic approach is now urgently needed (Section 5). Governance must, inter alia and in addition to managing what is already in the environment, reduce the risk of plastic becoming marine plastic litter and microplastic by factoring in production forecasts, setting global standards for design, provide security for end-markets and strongly support the 6R approach of reduce, redesign, refuse, reuse, recycle and recover and policy frameworks must be designed to keep pace with innovation, from production to disposal, while providing the necessary environmental guidance.

The assessment proposed three options for improved governance strategies and approaches:

- Option 1: Maintaining the status quo.
- Option 2: Review and revise existing frameworks to address marine plastic litter and microplastics and add a component to coordinate industry.
- Option 3: A new global architecture with a multilayered governance approach.



Above: Single-use plastics, such as wrappers, are a major source of marine litter. Left: Marine litter can sink, remain suspended in the water column or float, washing up on shores far from the source.

Table 1: Summary of the options for improved governance strategies and approaches to combat marine plastic litter and microplastics

	Option 1: Maintain Status Quo	Option 2: Revise and strengthen existing framework, add components to address industry	Option 3: New global architecture with multi-layered governance approach
Global umbrella mechanism specific to marine plastic litter and microplastics	Not recommended	Yes - Voluntary	Yes – Binding (combination of legally binding and voluntary measures)
Potential implementation methods	Strengthen the implementation of existing instruments, including the Regional Seas programmes and relevant multilateral environmental agreements.  Monitor developments under the Basel Convention that aim to further address marine plastic litter and microplastics within the scope of the Convention.	<ul> <li>Expand the mandate of an existing international body to include the coordination of existing institutions in the field of marine plastic related action. The coordination shall include:</li> <li>Building linkages between relevant instruments, e.g. the Basel Convention.</li> <li>Harmonizing international legal instruments and approaches in Regional Seas programmes.</li> <li>Promoting the implementation of the sustainable development goals, specifically SDG14.</li> <li>Encouraging and coordinating industry-led solutions and commitments.</li> <li>Strengthen and add measures specific to marine plastic litter and microplastics in Regional Seas programmes and other applicable instruments (See Annex).</li> <li>Revise e.g. the Honolulu Strategy to encourage improved implementation at the national level and agree on indicators of success.</li> <li>Adopt a voluntary agreement on marine plastic litter incorporating at least the following measures:</li> <li>Standardize global, regional and national reporting on production, consumption and final treatment of plastics and additives.</li> <li>Introduce voluntary national reduction targets.</li> <li>Develop/improve global industry guidelines, (e.g. for the management of polymers and additives; adoption of global labeling and certification schemes).</li> </ul>	<ul> <li>Establish a new international legally binding architecture.</li> <li>In parallel, launch option 2 to take action in the interim and gain experiences that support the development of the legally binding architecture.</li> <li>The legally binding architecture could be implemented in two phases:</li> <li>Phase I: Develop voluntary measures, including: <ul> <li>Introduction of self-determined national reduction targets.</li> <li>Development/improvement of industryled design standards that promote recovery and recycling.</li> <li>Phase II: Develop a binding agreement, to include: <ul> <li>Ratification/accession procedures to confirm commitment by States.</li> <li>An obligation to set self-determined national reduction targets.</li> <li>Develop and maintain national inventories on production, consumption, final treatment and trade of plastics and additives.</li> <li>Fixed timelines to review &amp; improve national reduction targets.</li> <li>A duty to cooperate to determine global technical standards to ensure basic level environmental and quality controls by industry.</li> <li>A duty to cooperate to determine global industry standards for reporting, labeling &amp; certification.</li> <li>Measures to regulate international trade in non-hazardous plastic waste.</li> <li>Compliance measures (monitoring &amp; reporting).</li> <li>Legal basis set for mechanisms for: liability &amp; compensation, funding and information sharing.</li> <li>Consideration of the needs of developing countries and regional differences (e.g. exemptions and extensions).</li> </ul> </li> </ul></li></ul>

# RECOMMENDATION TO THE THIRD SESSION OF THE UN ENVIRONMENT ASSEMBLY

**UNEA 3** to establish the mandate to progress one (or more) of the option(s) presented.

Included in this mandate would be the urgent need to make immediate progress on the following voluntary measures, as presented in this assessment:

- Assess the feasibility of progressing each of the three options presented.
- Progress the following voluntary measures, as presented in options 2 & 3:
  - > Develop and harmonize marine litter action plans, including monitoring of microplastics;
  - > Develop global industry-led self-regulated guidelines;
  - > Develop global labeling and certification schemes;
  - > Improve national reporting on production, consumption and trade of plastics and chemical additives, as well as final treatment processes and trade of plastic waste.
- Establish or strengthen an international body to coordinate these measures.
- Support the Secretariat of the Basel, Rotterdam and Stockholm Conventions to investigate options under

- the Basel Convention to address plastic waste, as per COP decision BC-13/11 and decision BC-13/17.
- Advance platforms for information sharing between industry, researchers, entrepreneurs, NGOs and policymakers.
- Regulate import and export of plastic waste with the aim of establishing transparent, stable and environmentally sustainable end-markets for plastic waste.
- Mainstream environmentally sound waste management and waste prevention into national development strategies with the aim of reducing marine plastic litter and microplastics.
- Develop waste profiles for high-leakage countries and provide assistance for the establishment of economically viable and tailored waste management services.
- Develop standardized methodologies for assessing impact from micro- and nanoplastics in marine organisms to further understand the full risk to aquatic ecosystems at community and population levels.
- Research the risks associated with human consumption of microplastics via marine species.
- Consider options for a global funding mechanism to assist remediation in those countries, particularly Small Island Developing States, which are an accumulation zone for marine plastic litter.



Accumulations of marine litter can become unsanitary, posing a threat to animal and human health, as well as marine ecosystems.



# 1. MARINE PLASTIC LITTER AND MICROPLASTICS

Plastic waste in the marine environment has raised the profile of the exponential growth in plastic production, in particular so called "disposable" and "single-use" plastic, without post-use planning resulting in leakage into the marine environment where a considerable component of marine litter is made up of plastic. Combined with the longevity of plastics in the environment, marine plastic litter and microplastics must deservedly be given special attention. A recent study estimates the following:

- 8,300 million metric tons (Mt) of virgin plastics have been produced to date,
- 6,300 Mt of plastic waste has been generated as of 2015,
- Of this waste, 9% has been recycled, 12% incinerated, and 79% has accumulated in landfills or the natural environment.
- 12,000 Mt of plastic waste will be in landfills or in the natural environment by 2050 under current production and waste management trends.3

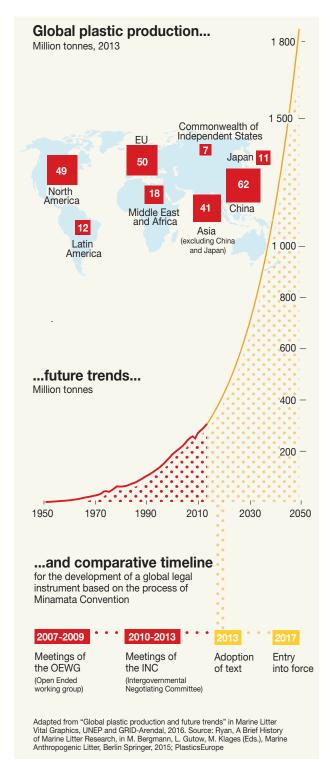
The First Global Integrated Marine Assessment indicates, "Litter disposal and accumulation in the marine environment is one of the fastest-growing threats to the health of the world's oceans."4 This is a complex social. environmental and economic issue of global scale that must consider a number of factors, particularly intragenerational equity.

Although our oceans are now visibly suffering from multiple stressors, the issue of marine plastic litter and microplastics is one that can be solved. Due to the urgency of the issue, options for immediate progress are suggested.

left: Modern fishing gear is predominantly made of synthetic fibres and can contribute to microplastics in the ocean through abrasion.

Figure 1: Timeline comparison of projected plastic production versus timeline for the development of a global legal instrument based on the process of the **Minamata Convention** 

(amended from http://www.grida.no/resources/6923)



<sup>3</sup> Geyer, R. et al, 'Production, use, and fate of all plastics ever made' (2017) 3(7) Science Advances.

DOALOS, First Global Integrated Marine Assessment. Chapter 25 "Marine debris" (UN Division for Ocean Affairs and the Law of the Sea, 2015).

# 2. OPTIONS FOR CONSIDERATION

Three options for improved governance and strategy approaches are presented here for consideration. It should be noted that these options serve as a starting point for global discussions on the way forward to combatting marine plastic litter and microplastics. Members of the Advisory Group<sup>5</sup> have contributed to the overall design of the options presented and guided the development of the Assessment. The three options are summarized in Table 1.

#### 2.1. OPTION 1: MAINTAINING THE STATUS QUO

The first option for combatting marine plastic litter and microplastics is to maintain the status quo. This option would recognize the actions and progress made under existing frameworks and strategies as discussed in this assessment.

These include: General Assembly resolutions particular to marine plastic litter, microplastics and sustainable fisheries; the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea; the Basel Convention; the Stockholm Convention; the voluntary Strategic Approach to International Chemicals Management (SAICM); MARPOL Annex V; the London Protocol; the Regional Seas Conventions and Action Plans, and Regional Marine Litter Nodes; the G7 Action Plan to Combat Marine Litter (2015); G20 Action Plan on Marine Litter (2017); the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA); the Global Partnership on Marine Litter (GPML), hosted by the GPA and the Global Partnership on Waste Management (GPWM).

Option 1: Maintaining the status quo would continue the momentum under the Regional Seas Conventions and Action Plans. Development of binding and voluntary instruments would be encouraged where these do not exist, as well as participation by all relevant States where binding instruments have been developed.

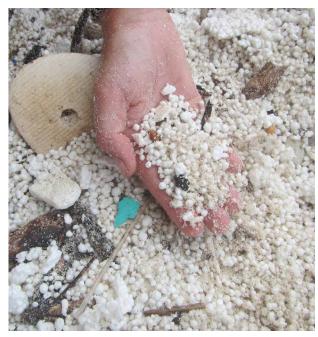
Noting the dire situation, resulting in global ecological and socio-economic impacts, it is the strong opinion of the Advisory Group that Option 1: Maintaining the status quo is not a solution.

5 The UN Environment established the Advisory Group, with an open call for all Member Sates and accredited Major Groups and Stakeholders (MGS) to nominate experts. The Advisory Group consisted of 32 members with scientific, legal and policy expertise from 27 countries, the European Commission and three MGSs.

# 2.2. OPTION 2: REVIEW AND REVISE EXISTING FRAMEWORKS TO ADDRESS MARINE PLASTIC LITTER AND MICROPLASTICS AND ADD A COMPONENT TO COORDINATE INDUSTRY

The second option for combatting marine plastic litter and microplastics includes adopting new instruments specific to marine plastic litter and microplastics under existing conventions and amending existing frameworks and approaches with measures specific to the prevention, mitigation and removal of marine plastic litter and microplastics. Option 2 adds a **voluntary global umbrella mechanism** for land-based and sea-based sources of marine plastic litter and microplastics to close the gap of this pollutant not being fully managed by any global institution. An international body would be strengthened to, inter alia, enhance coordination of actions conducted under different instruments and to improve engagement with industry for the development of self-regulatory measures.

The mandate of current conventions can be strengthened to enable improved management of marine plastic litter and microplastics. This applies in particular to the Basel, Stockholm and Rotterdam Conventions, all of which provide opportunity to improve the management of plastic polymers and additives at the global level. In addition,



Above: Expanded Polystyrene fragments are commonly found washed up on heaches

Opposite left: Evidence of marine litter being mistaken for food. Opposite right: Many types of seabirds are impacted by marine litter through ingestion, entanglement and habitat destruction.





the Global Action Plan developed under the Strategic Approach to International Chemicals Management (SAICM) could provide a voluntary foundation for managing those chemicals not regulated under the Stockholm Convention and assist in setting national reduction targets.

Refer to the Annex for measures within current global instruments and strategies that are relevant to marine plastic litter and microplastics and options for strengthening these instruments in this regard.

The global umbrella mechanism would provide a platform to facilitate coherent and sustained action across existing institutions and governing bodies with a specific focus on mitigating the negative effects of plastics. Through improved vertical and horizontal integration of all relevant stakeholders, the global umbrella mechanism can enable and support the Regional Seas programmes to strengthen the lifecycle management of plastics. Voluntary commitments from industry that are globally harmonized, but tailored for regional differences, would be more easily encouraged. The effectiveness of the Regional Seas in managing marine plastic litter and micro-plastics would thereby be improved by enhancing the capacity of the programmes to collaborate "upstream" with industry.

#### Should the decision be taken at UNEA-3 to progress with Option 2:

- The proposed voluntary measures should be implemented at the soonest opportunity, while
- Steps are taken to establish the global umbrella mechanism, and
- Discussions are initiated for options to strengthen current global instruments and strategies to combat marine plastic litter and microplastics

#### 2.3. OPTION 3: A NEW GLOBAL ARCHITECTURE WITH A MULTILAYERED **GOVERNANCE APPROACH**

A new global architecture may address the gaps and challenges identified, both at the institutional and the instrument level. A new international legally binding agreement could complement, without undermining or duplicating, existing instruments. Lessons can be learned from existing agreements that aim to manage and fund other global issues. In recognition of the lengthy timeframes required to adopt such an agreement and the urgent need to initiate immediate and effective measures, a dual approach is warranted. A new global architecture would provide a combination of binding and voluntary measures. These could include voluntary national reduction targets, improved standards, guidelines and annexes for priority chemicals, polymers requiring special attention, products of concern for marine plastic litter and microplastics, legislative guidance, best available technology and best environmental practices.

#### This dual approach would include:

- 1. Undertaking urgent and voluntary measures as outlined in option 2 while, in parallel,
- 2. Developing a global binding framework.

At the institutional level, UN Environment has been identified as a strong candidate for this role, if given the mandate by UNEA. UN Environment has a strong history and body of experience in marine plastic litter and microplastics, has facilitated international negotiation on environmental agreements and already hosts Secretariats for the Regional Seas Programme, the Secretariat of the Basel, Rotterdam and Stockholm Conventions and the Secretariat for the Convention on Biological Diversity.<sup>6</sup> The Global Partnership on Marine Litter, hosted by UN Environment/GPA, could play a stronger role through, for example, the establishment of a scientific advisory body.

<sup>6</sup> This is subject to the discussions under Resolution 2/18, on the relationship between UNEP and the multilateral environmental agreements for which it provides the secretariats.

The mandate for a multilayered governance approach could cover, inter alia:

Voluntary measures (Phase I)	<ul> <li>National reduction targets</li> <li>Cooperate to determine global self-regulatory standards for industry</li> </ul>
Binding measures (Phase II)	<ul> <li>Control measures (production and consumption reduction, trade)</li> <li>Binding commitment by States through ratification (minimum standards)</li> <li>Set self-determined national reduction targets</li> <li>Review and improvement of self-determined national reduction targets</li> <li>Maintain national inventories (production, consumption, disposal, trade)</li> <li>Cooperate to determine global national standards</li> <li>Develop global labeling and certification schemes</li> <li>Regulation of international trade of plastic waste</li> </ul>
Compliance	<ul><li> Global monitoring standards</li><li> Global reporting standards</li></ul>
Consideration for States	in need of differential treatment
Set the legal basis for the following mechanisms:	<ul><li>Information sharing</li><li>Funding</li><li>Liability and compensation</li></ul>
Procedures and timelines	s for review

The relationship of the new global architecture to existing multilateral environmental agreements (MEAs) and other treaties would need to be clarified and objectives aligned to prevent overlap and duplication of effort.

# Should the decision be taken at UNEA-3 to progress with Option 3:

- The decision could be made to establish an Open Ended Working Group (OEWG) or an Intergovernmental Negotiating Committee (INC).
- Following this, negotiation of a new international legally binding instrument could take 3-4 years to complete.
- Depending on political commitment, a new agreement could come into force
   4 years later.



Cleanup methodologies must consider the presence of hazardous materials, such as these toxic canisters that washed up over a number of years on beaches along the entire east coast of Australia.

# 3. MAPPING CURRENT LEGAL FRAMEWORKS SUMMARY OF OUTCOMES

The assessment examined the following international and regional instruments (Fig. 2 & 3):

#### **POLLUTION ORIENTED AGREEMENTS**

- The United Nations Convention on the Law of the Sea (UNCLOS):
- The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 (London Convention) and its 1996 Protocol (London Protocol); and
- Annex V of the International Convention for the Prevention of Pollution from Ships (MARPOL).

#### **BIODIVERSITY AND SPECIES ORIENTED AGREEMENTS**

- The Convention on Biological Diversity (CBD);
- The Agreement for the 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 (United Nations Fish Stocks Agreement); and
- The Convention on the Conservation of Migratory Species of Wild Animals (CMS).

#### **CHEMICALS AND WASTE ORIENTED AGREEMENTS**

- The Stockholm Convention on Persistent Organic Pollutants (Stockholm Convention); and
- The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention).

#### **REGIONAL INSTRUMENTS**

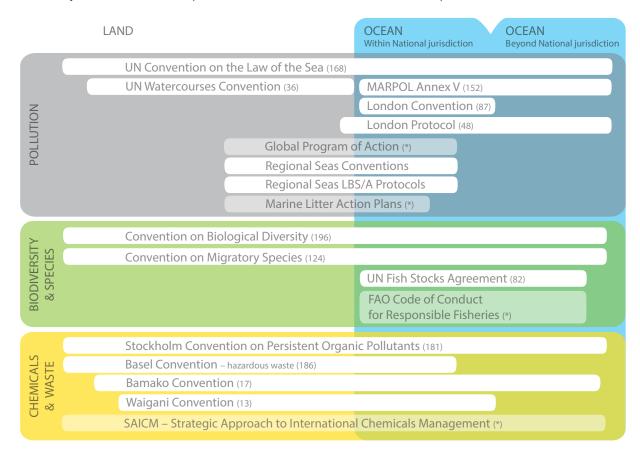
- Regional Seas Conventions, LBS/A Protocols and Action Plans on marine litter;
- The Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa (Bamako Convention); and
- The Waigani Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Trans-boundary Movement and Management of Hazardous Wastes within the South Pacific Region (Waigani Convention).



Sorting marine litter and identifying the source, where possible, can assist in determining appropriate policy responses.

Figure 2: Diagrammatic overview of relevant global and regional instruments

(\* Voluntary instrument. Numbers in parentheses indicate ratifications/accessions as of September 2017)



#### 3.1. THE MAIN GAPS IDENTIFIED

The assessment measured the effectiveness of the instruments illustrated above based on two UN documents entitled 1) Methodology for Reviewing the Coherent Implementation and Effectiveness of Multilateral Environmental Agreements (MEAs) at the National Level and 2) Guidelines on Compliance with and Enforcement of Multilateral Environmental Agreements. Based on the requirements of the resolution (UNEP/EA.2/Res. 11), implementation at the national level was not assessed. The study concluded that the main gaps of the existing governance frameworks and strategies are as follows:

- There is little recognition at the international policy level of the potential risks to human health, particularly from micro- and nanoplastics.
- Application of precautionary principle and freedom of information in this regard is inadequate.
- Solid waste management services and wastewater treatment are given greater priority in the voluntary regional action plans than within the binding instruments adopted at the regional level.
- Strategies and timelines for the management of solid waste vary amongst the regional action plans.
- The IMO has recently identified sewage sludge and dredged material as two waste streams regulated

- under the London Protocol that may contain plastics. Under certain conditions, the Protocol provides for the dumping of these wastes into the marine environment. Efforts are underway to investigate options to reduce this risk.
- Ocean dumping is prohibited under the Regional Seas conventions in ten regions, with three regions adopting protocols specific to the dumping of waste from vessels, including plastics.
- Microplastics from land-based sources as well as fishing and aquaculture activities<sup>7</sup> are not adequately addressed in international or regional instruments.
- Industry pollution and emissions into waterbodies are provided for in most Regional Seas instruments through the duty to prevent pollution from point sources. However, not all provide for the establishment of water quality standards maintained through emission limits or permits.
- 7 FAO, Microplastics in fisheries and aquaculture: status of knowledge on their occurrence and implications for aquatic organisms and food safety, FAO Fisheries and Aquaculture Technical Paper 615 (Food and Agriculture Organization of the United Nations, 2017); Welden, N. A. and Cowie, P. R., 'Degradation of common polymer ropes in a sublittoral marine environment' (2017) Marine Pollution Bulletin.

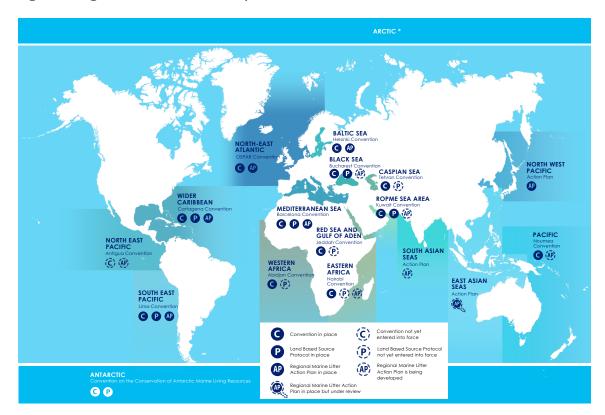
- Loss of microplastics through wear and tear during the use of products is not required to meet environmental quality standards, e.g. water quality standards. The design of plastic products could be better incorporated into environmental impact assessments (EIA) under the principle of extended producer responsibility (EPR) to reduce such loss.
- There is recognition within the *plastics industry* of the impact their products have on the marine environment. Industry initiatives tend to favor establishing and maintaining economically viable end-markets for plastic waste. This in turn will drive collection services and attract private sector investment in end-of-life treatment. The numerous industry initiatives underway should encourage alignment of international, regional and sub-regional governance strategies and approaches with the desire of industry to work towards solutions.

The Regional Seas Programme consists of eighteen regions. As Figure 2 indicates, the adoption of binding and voluntary instruments is not uniform across all regions. The approaches to the mitigation of marine plastic litter and microplastics also vary across regions.



Plastics continue to break down into smaller fragments while at sea.

Figure 3: Regional instruments for the protection of the marine environment<sup>8</sup>



Note: The Baltic Sea region has adopted an Annex to the Helsinki Convention (not a Protocol) to manage land-based sources of marine pollution.

Note: The Baltic Sea region has adopted an Annex to the Helsinki Convention (not a Protocol) to manage land-based sources of marine pollution.

## **CONCLUSION**

This assessment has mapped the current governance strategies and approaches at the international, regional and sub-regional levels and outlined progress and efforts under a number of instruments. These efforts will provide some degree of progress, but combined may not reach the desired outcomes at a global level of protecting the environment, human health and food security. A long-term and holistic approach will begin with the strengthening of current efforts and focusing on each aspect of the lifecycle of plastics. Voluntary measures can provide a strong foundation for a new global architecture that combines voluntary, self-regulatory and binding measures. The United Nations Environment Assembly may consider possible policy options presented in this study to accelerate global efforts to address marine litter. The right to a healthy environment for current and future generations requires a shift in policy direction if the current flow of plastic litter and microplastics into the environment is to be checked.



Entanglement, ingestion and habitat destruction are some of the impacts, both on shore and at sea, resulting from marine litter.



The many sources of marine litter require a holistic policy response and cooperation with a number of industry sectors.



International instruments, their application to marine plastic litter and options for strengthening

Instruments	Асгопут	Designation	Binding /voluntary	Measures of implementation	Any annex related to plastics or fishing gear	Compliance mechanism*	Gaps in addressing pollution of the marine environment related to plastic	Options for addressing marine plastic litter & microplastics
Pollution oriented instruments	ents							
United Nations Convention on the Law of the Sea	NNCLOS	Protection of the marine environment from all sources of pollution	Legally binding global instrument	Varies – by reference to international rules and standards		<b>&gt;</b>	Does not expressly address marine plastic litter and microplastics.	Strengthen the implementation of the relevant provisions of UNCLOS.
International Convention for the Prevention of Pollution from Ships	MARPOL	Address marine pollution from ships	Legally binding global instrument	All waste discharge prohibited except as listed	Annex V - Prevention of pollution by garbage from ships (includes all plastics & fishing gear)	z	Requirement to carry onboard a garbage management plan applies only to vessels 100 GT or more and ships certified to carry 15 persons or more / garbage record book required only for ships 400 GT and ships certified to carry 15 persons or more.	Include vessels below 100 gross tonnage (most fishing vessels) that are not obligated to maintain garbage management plans and record books or retain receipts for port disposals.
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972)	London Convention	Intentional dumping into the sea from ocean sources	Legally binding global instrument	Listing of prohibited pollutants and those requiring permits for dumping activities	Annex of prohibited pollutants. Annex listing pollutants requiring dumping permit	z	Limited to intentional disposal of plastics at sea from ocean sources.	Encourage ratification of the London Protocol as the preferred instrument (as agreed by the LC/LP Parties, the Convention will not be amended).
Protocol for the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1996)	London Protocol	Intentional dumping into the sea from ocean sources	Legally binding global instrument	Dumping of all wastes not permitted except where prior assessment satisfies specific conditions	Annex of wastes permitted subject to conditions	>	Limited to intentional disposal of plastics at sea from ocean sources.	Improve levels of ratification. Address pathways identified by IMO of dredged material and sewage sludge.

The Convention on the Law of Non-Navigational Uses of International Watercourses	International Watercourses Convention	Conservation of shared watercourses, including surface and groundwater	Legally binding global instrument	Mutually agreeable measures and methods - joint water quality objectives		z	Does not expressly address marine plastic litter or microplastics.	States must establish water quality standards, but no obligation to exchange such data unless requested. Establish duty to monitor and share results, including for macro- and microplastics.
Biodiversity-species oriented instruments	ted instruments							
Convention on Biological Diversity	СВО	Conservation of biological diversity	Legally binding global instrument	Voluntary guidelines		Z	COP XIII/10 is not legally binding.	Extend to include impacts on biodiversity from microplastics.
Agreement for the 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	United Nations Fish Stocks Agreement	Straddling and highly migratory fish stocks	Legally binding global instrument	Conservation measures, ecosystem approach		z	Limited to fishing gear. Application is limited to the conservation and management of straddling fish stocks and highly migratory fish stocks beyond areas under national jurisdiction except for those provisions mentioned in article 3.	Extend "catch by lost or abandoned gear" to include all impacts of abandoned, lost or otherwise discarded fishing gear (ALDFG). Establish duty for all Regional Fisheries Bodies to enforce marking of fishing gear.
Convention on the Conservation of Migratory Species of Wild Animals	CMS	Conservation of migratory animals	Legally binding global instrument	Strategic Plan		z	Limited to two species.	Extend guidelines for reduced risk to some species to all migratory species. Establish obligation for 'range states' to prevent harm from marine plastic litter and microplastics.
Chemicals and waste oriented instruments	nted instruments							
Stockholm Convention on Persistent Organic Pollutants	Stockholm Convention	Chemicals	Legally binding global instrument	Implementation plan	Аппех А Аппех В	Y (not in force)	Scope limited to certain chemicals used the production of certain plastics.	Additional listings of chemical additives of concern used in plastics manufacturing.

Basel Convention on the Transboundary Movements of Hazardous Wastes and Their Disposal	Basel Convention	Hazardous wastes and other wastes (plastics as other wastes)	Legally binding global instrument	Waste management measures	>	Plastics not included as "hazardous waste." Efforts are underway to promote the environmentally sound management of plastic waste as a household waste, but these are guidelines only.	List plastics containing resins or additives of concern requiring appropriate disposal or recycling methods, e.g. those containing PCBs, decaBDE (both listed under the Stockholm Convention) and endocrine disruptors. Promote best management practices for the design, production and transport of plastics to reduce the generation of plastic waste.
Global strategies and soft law instruments	law instruments						
The 2030 Agenda for Sustainable Development	2030 Agenda	Broad scope, including pollution management	Non-binding			Non-binding.	Application of a broader set of Sustainable Development Goals, not only SDG14.1.
FAO Code of Conduct for Responsible Fisheries	Code of Conduct	Fishing gear	Non-binding		z	Non-binding.	Encourage Regional Fisheries Bodies to establish standards for marking of fishing gear, not just national standards.
Global Programme of Action for the Protection of the Marine Environment from Land-based Activities	GPA	All land-based pollution	Non-binding intergovernmental mechanism		z	No specific targets to prevent, reduce or eliminate marine plastic litter or microplastics.	Strengthen GPA to coordinate land- and sea-based activities, & engage industry to develop self-regulatory mechanisms.
SAICM adopted a Global Plan of Action	SAICM	All chemicals	Non-binding			Broad scope and does not expressly address marine plastic litter or microplastics.	Broader application to additives used throughout the lifecycle of plastics.
Honolulu Strategy: A Global Framework for Prevention and Management of Marine Debris	Honolulu Strategy	All land & ocean sources of marine debris	Strategy		z	Does not provide specific targets to prevent, reduce or eliminate marine plastic litter or microplastics.	Revise to include targets and timelines.

<sup>\*</sup> Refers to formal compliance mechanisms only.

#### **United Nations Environment Programme**

United Nations Avenue, Gigiri
PO Box 30552, 00100 Nairobi, Kenya
Tel +254 20 7621234
publications@unenvironment.org
www.unenvironment.org