International and regional legal and policy landscape to respond to pollution from marine plastics in Southeast Asia





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1. Environment General & Science Southeast Asia (SEA) is often referred to as a hotspot for marine plastic pollution as

This category of international bodies and instruments include those that have a broad environmental mandate and do not regulate specific sectors of activities. In the context of the pollution of the marine environment from plastic debris (as from other substances), the starting instrument that frames the landscape is **UNCLOS**, at the centre of the horrendogram. Instruments displayed in the different petals of the flower implement obligations contained in UNCLOS that are applicable to pollution from marine plastics.

UNEA is the world's highest-level legal and policy decision-making body on the environment. It adopts resolutions, declarations and recommendations by consensus of its 193 member states (e.g. the 2030 Agenda for Sustainable Development and its 17 SDGs, which was later also adopted by the UNGA (70/1). It has focused on pollution from marine plastic litter and microplastics since its first meeting in 2014 and has since adopted a number of resolutions that have shaped subsequent legal and policy developments at global and regional level. The first session of UNEA elaborated on the concerns and challenges from marine debris and microplastics in Resolution (1/6). The newest **UNEA Resolution (5/14)** decides to convene an intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment. The intergovernmental negotiating committee starts its work during the second half of 2022, with a goal to complete its work by the end of 2024. Paragraph 15 of the Resolution calls upon all member states to continue and step up activities, and adopt voluntary measures, to combat plastic pollution, including measures related to sustainable consumption and production, which may include circular economy approaches, and to develop and implement national action plans, while enhancing international action and initiatives under national regulatory frameworks.

UNEP coordinates global environmental activities, and assists developing countries in implementing environmentally sound policies and practices. UNEP supports global and regional actions on marine plastic litter and microplastics. Examples include (i) hosting the global programme of action for the protection of the marine environment from land-based activities (ii) developing the GPML with other UN Bodies (iii) launching the Clean Seas campaign (iv) publishing technical guidelines, toolkits and reports.

Other bodies such as GESAMP, UNESCO and IOC also support the development of technical measures that can be embraced by other sectors.

2. Shipping

5. Conservation

these treaties.

Whilst land-based sources of plastic are recognised to largely dominate compared with plastic debris from sea-based sources, plastic debris from vessels are an acknowledged source of marine plastics.

The **IMO**, as the global regulator for international shipping activities, within which, marine environmental issues, has been regulating the disposal of plastic from vessels for decades. **MARPOL Annex V** on the prevention of pollution by garbage from ships has always been banning the disposal of plastic debris in the marine environment. However, the plastic crisis has prompted the IMO to review existing regulations and investigate what additional measures could be adopted to prevent marine debris from activities that fall under its mandate. In June 2018, marine plastics became a new agenda item at the IMO for this purpose, following the impetus provided by UNEA and UNGA. Steps adopted since by the IMO have included:

- the adoption of an IMO Action Plan to Address Marine Plastic Litter from Ships,
- the development of a regulatory framework matrix of marine plastic litter from ships, and
- the extended requirement for vessels of 100-400GT (previously above 400GT) to carry a Garbage Management Plan and a Garbage Record Book.

Other on-going work streams include the marking of fishing gear, the reclassification of pellets as hazardous substances after the X-Press Pearl incident, microplastic particles in ships' greywater and the enhancement of port reception facilities.

GESAMP, as a joint expert group sponsored by 10 UN organisations, has prepared several reports on different aspects of plastic pollution to support the work of different intergovernmental bodies. Notable publications include 'Sources, Fate and Effects of Microplastics in the Marine Environment' Part 1 (2015), Part 2 (2016), 'Guidelines For the Monitoring and Assessment of Plastic Litter in the Ocean' (2019) and lastly 'Sea-Based Sources of Marine Litter' (2021).

Southeast Asia (SEA) is often referred to as a hotspot for marine plastic pollution as a result of a combination of circumstances including an important share of the global production of virgin plastic coming from the region, the low price of plastic, high population level, rapid urbanisation in coastal areas, and an overall weak waste management infrastructure.

Given the multiple sources and processes by which plastic debris of different types and sizes reach the marine environment, the landscape of the legal and policy response must encompass the activities involved in these many sources. An overview of the legal and institutional processes that shape global responses to pollution from marine plastics (central part of the diagram) and the way in which they extend to the regional level (represented outside the flower shape) are set out below in an horrendogram of relevant legal instruments, policy documents and the intergovernmental institutions they relate to. In parallel to global processes, regional states have also established intergovernmental organisations and mechanisms for the protection of marine environment that include a response to pollution from marine plastic pollution. Many of them have no or limited institutional connections with global processes. To note, some activities at sea than can generate plastic waste do not have a global intergovernmental body.



Legend & Acronyms

International organisations and initiatives

Related international subsidiary bodies
Regional organisations and initiatives

Related regional subsidiary bodies

Related regional subsidiary bodies
 International and regional legally binding instruments
 International and regional voluntary instruments

Science-policy guidance

ALDFG: abandoned, lost or otherwise discarded fishing gears

APEC: Asia-Pacific Economic Cooperation **APFIC:** Asia-Pacific Fisheries Commission **ASEAN:** Association of Southeast Asian Nations **Basel Convention:** Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal BCRC-SCRC Indonesia: Basel Convention Regional Centre for South-East Asia **CBD:** Convention on Biological Diversity **CITES:** Convention on International Trade in Endangered Species of Wild Fauna and Flora CMS: Convention on the Conservation of Migratory Species of Wild Animals **COBSEA:** Coordinating Body on the Seas of East Asia COFI: FAO Committee on Fisheries

CTI-CFF: Coral Triangle Initiative on Coral Reefs, Fisheries & Food Security

EAS: East Asia Summit

FAO: Food and Agriculture Organisation

GESAMP: Group of Experts on the Scientific Aspects of Marine Environmental Protection

GPML: Global Partnership on Marine Litter initiative

GPML: Global Partnership on Marine Litter initiative
IMO: International Maritime Organisation
IOC-WESTPAC: Intl Oceanic Commission
Sub-Commission for the Western Pacific
IWC: International Whaling Commission
LC/LP: 1972 London Convention on the
Prevention of Marine Pollution by Dumping

of Wastes and Other Matter and its 1996
Protocol
MARPOL: International Convention for the
Prevention of Pollution from Ships
MEPC: Marine Environmental Protection

PEMSEA: Partnerships in Environmental Management for the Seas of East Asia POPs: persistent organic pollutants RAP MALI: COBSEA Regional Action Plan on Marine Litter Rotterdam Convention: Rotterdam Convention on the Prior Informed

Consent Procedure for Certain
Hazardous Chemicals and Pesticides in
International Trade
RSP: UNEP's Regional Seas Programme
SEA: Southeast Asia
SDGs: Sustainable Development Goals

SEAFDEC: Southeast Asian Fisheries
Development Center
Stockholm Convention: Stockholm
Convention on Persistent Organic

Pollutants
UN: UNited Nations
UNCLOS: UN Convention on the Law of the Sea

UNEA: UN Environment Assembly
UNEP: UN Environment Programme
UNGA: UN General Assembly

3. Fisheries incl. Aquaculture

Marine fisheries and aquaculture activities have been recognised as a substantial contributor to marine plastics, with ALDFG being flagged as a main issue in a number of marine basins including Southeast Asia.

The **FAO** is the UN specialised agency with a global mandate for fisheries policy (including aquaculture) through its COFI and the objective to reduce ALDFG by 2025 by combatting, minimising and eliminating them and facilitating the identification and recovery of such gear. In 2019, FAO adopted the Voluntary Guidelines on the Marking of Fishing Gear.

Also see developments under IWC under '5. Conservation'.

4. Waste and Chemicals, incl. Dumping

waste.

Harmful chemicals released from plastic products throughout their entire life cycle can pose a serious risk to the environment (air, water and soil) and human health. Several international conventions provide for regulations on different aspects of the management of environmentally hazardous materials and aim to restrict and control the production, use and trade of hazardous chemicals for production or as

The **Basel Convention** regulates the transboundary movement of hazardous waste and other wastes to make such trade operate in accordance with environmentally sound management principles. The 2019 amendments of the Basel Convention clarify the scope of plastic wastes presumed to be hazardous and therefore subject to the Prior Informed Consent (PIC) procedure.

The **Stockholm Convention** prohibits, restricts and aims to eliminate the production, use and import-export of Persistent Organic Pollutants (POPs). POPs can be associated with plastic production, and found with marine plastic litter (e.g. additives, flame retardants or plasticisers, such as BDEs, HCHs, PFOSA, its salts and perfluorooctane sulfonyl fluoride).

The **Rotterdam Convention** promotes shared responsibility and cooperative efforts among state parties in the international trade of certain hazardous chemicals in order to protect human health and the environment from potential harm. It also facilitates information exchange about the characteristics of hazardous chemicals. Annex III of the Convention lists chemicals that are submitted to the PIC procedure to ensure that recipients are fully informed of hazardous characteristics and support their environmentally sound use. It includes 52 chemicals. This formal PIC procedure applies to all substances listed in the Basel and Stockholm Conventions that may still be traded but under a number of conditions (e.g. DDT and PCB). Some chemicals, of which the disposal at sea is prohibited under the LC/LP, are also listed in this Annex III (e.g. mercury).

The **LC/LP** promotes effective control and prevention of pollution of the sea by dumping of waste and other matter, including the dumping of plastic waste generated on land or offshore into the ocean. Under LC/LP, dumping plastic waste at sea is prohibited. LC/LP's mandates do not cover land-based sources of pollution unless the concerned plastic pollutants are loaded on a vessel for the purpose of disposal at sea. To note, the IMO provides the secretariat of the LC/LP but the meetings of the governing bodies are separate from the meetings of the MEPC, which means the LC/LP is administered separately from other IMO treaties (which are focused on commercial shipping).

Regional Legal and Policy Landscape

classification of recovered plastics and other debris and developed liaison with other relevant expert bodies.

Several intergovernmental bodies have competing and complementary mandates for the development of policy on marine plastic pollution in SEA. However, whilst they may be seen as implementing binding and non-binding provisions of international law, none of them operate under a binding regional instrument.

Marine plastics fall within the mandate of several conservation-focused treaties for the adverse impact they can cause to the marine species and ecosystems protected by

The scope of application of the CBD is wider than the conservation and sustainable use of marine biological diversity. However it includes it. In this context, several

work streams under CBD bodies have considered adequate responses to marine plastics under its mandate. Example of technical documents adopted include the

Voluntary Technical Guidance on Preventing and Mitigating the Impacts of Marine Debris on Marine and Coastal Biodiversity and Habitats. The CMS, CITES, Ramsar

their regulatory mandate. They have published reports, adopted recommendations and shared best practices to respond to pollution from marine plastics and keep

Convention and the World Heritage Convention have raised concerns on threats from marine plastics for the marine species, ecosystems and or habitats that fall within

monitoring this issue. Work streams of the bodies established under the Whaling Convention also include protocols for pathology for microdebris and the standardised

ASEAN, an independent regional organisation, has the broadest institutional policy mandate, institutionally and substantively, and has made plastic pollution a priority since 2018. Marking their latest progress in a specific and concrete **Regional Action Plan for Combating Marine Debris**, featuring policy support, research innovation, capacity building, public awareness raising, and private sector engagement. Several ASEAN Working Groups consider different aspects of pollution from marine plastics to implement this action plan (see pink hexagons in the institutional areas of work of the horrendogram).

COBSEA, as the body in charge of the RSP under UNEP in the seas of East Asia, also seeks to tackle regional marine litter challenges. The updated 2019 **COBSEA RAP MALI** aims to guide coordinated regional action of integrated management of marine debris, including preventing and reducing marine litter from land and sea-based sources and promoting regionally coherent monitoring of marine pollution status. In this context COBSEA oversees the development of expert reports to inform decisions of the body. Recently, this included a regional guidance document on harmonising marine litter monitoring, that shares regional priorities identified by COBSEA countries and existing monitoring efforts and capacities in participating countries.

Other regional intergovernmental bodies that also cooperate with non-state actors and have work streams on pollution from marine plastics are PEMSEA, APEC, CTI-CFF and IOC-WESTPAC.

Science to Inform Law & Policy Processes?

The development of a holistic, consistent, coordinated and effective response to pollution of marine plastics has many layers of complexity. This poster illustrates the complexity resulting from the number of bodies and instruments that shape the international and regional institutional and legal landscape of the policy mandate.

- Coordination and consultation processes between work streams and bodies are developing but are often not robust enough. Key features include:

 Differences in mandates translates in different approaches and data peods to support policy developments.
- Differences in mandates translates in different approaches and data needs to support policy developments
 Legal and policy steps requires policy-ready science which scientific research rarely provides (see RRI 2.0 visualisation for more information on this)

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platform for the Regional Research Inventory 2.0 (RRI 2.0)