

Quick view document for AHOEEG2 meeting Geneva, December 3 – 8, 2018

FRAMING THE PROBLEM

The marine litter crisis is first and foremost driven by rising global plastic pollution, compounded by massive investment in new plastic production facilities (an additional 100 million tonnes of plastic/year is expected by 2025) and inadequate downstream waste management systems. The consequences of plastic pollution extend far beyond marine litter impacts and include:

- **Impacts on Oceans (SDG 14).** Up to 12 million tonnes of plastic leak into our oceans each yearⁱ with severe impacts on marine biodiversity. Annual economic costs top \$13 billion and are rising exponentially, hitting tourism, fisheries, shipping and other industriesⁱⁱ.
- **Impacts on Climate Change (SDG 13).** Nearly all plastic feedstocks are derived from fossil fuels—oil, natural gas, coal—which expend carbon throughout the lifecycle, from extraction, to refinement, production and conversion, and finally to end-of-life treatment, such as incinerationⁱⁱⁱ. As waste, plastic emits methane, a powerful greenhouse gas.
- **Impacts on Terrestrial and Freshwater Environments (SDG 15 and SDG 6).** More than 95% of global annual plastic waste output stays on land, and more than half of all microplastics remain on land.^{iv}
- **Impacts on Public Health (SDG 3).** Plastic polymers are made using additives including stabilizers and plasticizers (endocrine disrupting chemicals [EDCs]), which pose risks to human health.^v Microplastics also attract and transport persistent organic pollutants (POPs) and pathogens.^{vi} Microplastics and toxic additives contaminate our food chain, water supplies, and our bodies: Samples of drinking water in five continents have detected significant contamination rates for plastic microfibers.^{vii} Nearly every human and animal tested has accumulated persistent toxic plastic chemicals in their systems, and microplastics have even been found in human feces across the globe.^{viii}
- **Impacts on Sustainable Consumption and Productions patterns (SDG 12).** The continued rise of plastic production perpetuates the throw away culture and unsustainable consumption and production patterns. It hinders or prevents the environmentally sound management of chemicals and all wastes throughout their life cycle.

In order to address the plastic pollution crisis, we must consider the whole life cycle and all impacts of plastics (on health, climate, biodiversity, etc..) from the wellhead to the ocean. Expert assessment prepared for UNEA3 concluded that the existing global framework is unable to do this.

FRAMING THE SOLUTION

- **Expand the Framework.** The severity and urgency of the situation requires the development and adoption of a new global architecture which includes new legally binding commitments around more than just the marine litter impacts of plastic.
- **Beware of False Solutions.** Incineration, waste-to-energy and plastic-to-fuel technologies are unacceptable and environmentally unsound approaches to plastic waste, which produce significant quantities of greenhouse gases, toxic air pollutants, highly toxic ash, and other residues.
- **Global Controls Are Needed.** Hazardous substances must be phased out of plastics at the design stage. The presence of toxic substances in plastics (*e.g.* flame retardants, plasticizers such as bisphenol A, phthalates, and other EDCs and POPs) prevents the safe recycling of most plastic

waste. Currently, plastic recycling results in the recirculation and concentration of toxic substances into new products (e.g. toys, textiles, food contact materials), undermining a circular economy approach.

- **Consider the Full Lifecycle.** The AHOEEG should examine the feasibility and effectiveness of a new legally binding global multilayered governance framework to manage the full lifecycle of plastics, in addition to exploring urgent actions based on the existing framework.
- **Avoid Redundancy While Filling Gaps.** This new framework should coordinate with existing multilateral agreements where appropriate, while otherwise filling the significant gaps in coverage that have been identified by UNEP and others, in particular aiming to:
 - Address the production and consumption of virgin plastic and toxic additives; and
 - Drive national and regional action toward a common objective.

The Four Pillars of a New Global Architecture.

This new instrument could be structured around the four following pillars:

- Pillar 1: Coordination.
- Pillar 2: Plastic Pollution Prevention
- Pillar 3: Financial Support
- Pillar 4: Technical Support

More information on this approach can be found in [Toward a New Global Convention with a Multi-Layered Governance Approach to Address Plastic Pollution](#), a “thought starter” prepared in advance of the 2nd Meeting of the AHOEEG.^{ix}

RECOMMENDATION

The AHOEEG should include, in its progress update to the United Nations Environment Assembly at its 4th session, an urgent recommendation to undertake actions toward a new global architecture to address the full lifecycle of plastics and plastic pollution, with particular emphasis on governance.

ⁱ J. R. Jambeck et al., *Plastic Waste Inputs from Land into the Ocean* (Science, 13 February 2015).

ⁱⁱ United Nations Environment Programme, *Plastic Waste Causes Financial Damage of US\$13 Billion to Marine Ecosystems Each Year as Concern Grows over Microplastics*, available at <http://www.unep.org/newscentre/Default.aspx?NewsID=2287&StoryID=2287>; Heinrich Böll Stiftung Publication Series Ecology (Volume 43), Nils Simon and Maro Luisa Schulte, *Stopping Global Plastic Pollution: The Case for an International Convention* (2017), pp. 9 and 22.

ⁱⁱⁱ Center for International Environmental Law, *Fueling Plastics: Fossils, Plastics, & Petrochemical Feedstocks* (2017), available at <http://www.ciel.org/wp-content/uploads/2017/09/Fueling-Plastics-Fossils-Plastics-Petrochemical-Feedstocks.pdf>.

^{iv} Jambeck et al (2015). *Plastic waste inputs from land into the ocean*. Science. 347 (1). pp. 768-771

^v Ellen MacArthur Foundation, *The New Plastics Economy: Rethinking the Future of Plastics* (2015), pp. 29-30.

^{vi} GESAMP, *Sources, Fate and Effects of Microplastics in the Marine Environment: A Global Assessment* (2015), p. 45.

^{vii} See Chris Tyree and Dan Morrison (Orb), *Invisibles: The Plastic Inside Us* (2017), available at https://orbmedia.org/stories/Invisibles_plastics.

^{viii} United European Gastroenterology (UEG), *UEG Week: Microplastics Discovered in Human Stools Across the Globe in “First Study of its Kind”* (23 October 2018, available at <https://www.ueg.eu/press/releases/ueg-week-microplastics-discovered-in-human-stools-across-the-globe-in-first-study-of-its-kind/>).

^{ix} Environmental Investigation Agency (EIA), Center for International Environmental (CIEL), University of New Zealand and the Center for Oceanic Awareness, Research and Education (COARE), *Toward a New Global Convention with a Multi-Layered Governance Approach to Address Plastic Pollution* (November 2018), available at <https://www.ciel.org/wp-content/uploads/2018/11/Thought-starter-for-a-new-global-convention-with-a-multi-layered-governance-approach-to-address-plastic-pollution-Nov-2018.pdf>.