

### The Problem

Up to twelve million tonnes of plastics leak into our oceans annually, severely harming biodiversity and fostering a global marine plastic pollution crisis.<sup>1</sup> This crisis has been precipitated by a dramatic increase in plastic pollution globally, driven by massive investment in new plastic production facilities (with an additional 100 million tonnes per year expected by 2025). Seemingly every month, more production facilities are permitted for construction.

Downstream waste management efforts are overwhelmed with current production and cannot possibly address growing volumes, especially as more than 40% of plastics are used as single-use packaging.

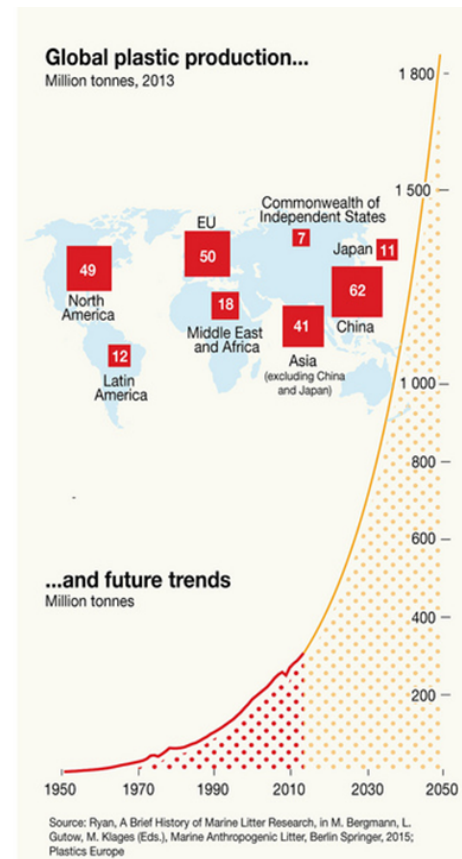
Plastics have damaging effects well beyond the ocean:

- ❑ **Land.** More than 95% of global annual plastic waste and microplastics stay on land, creating an expensive waste management burden and social, cultural, and economic crises for communities across the globe.<sup>2</sup>
- ❑ **Human & animal health.** Nearly every human and animal has accumulated harmful persistent chemicals from plastics in their bodies. Some of these chemicals leach from plastic food and beverage containers<sup>3</sup>, and they are recirculated in recycling processes.<sup>4</sup>
- ❑ **Climate.** It is predicted that with the global plastics industries' expansion plans, plastics will account for nearly 20% of total oil consumption and more than 10% of the annual global 1.5°C carbon budget by 2050.<sup>5</sup>

The effects of plastics along the life cycle are inherently transboundary: plastics themselves travel across political lines while being produced, consumed, and wasted, and the toxicants, greenhouse gases, and pellets emitted during production also cause harm across borders.

During the 5 days of discussion on marine litter and microplastics at the third meeting of the Ad Hoc Open Ended Expert Group, an estimated 4.4 million tonnes of plastics will be produced. Approximately 164,000 tonnes of this will be emitted into the marine environment.<sup>6</sup>

### The time for solutions is now.



<sup>1</sup> Jambeck et al., Plastic Waste Inputs from Land into the Ocean, Science (Feb 2015)

<sup>2</sup> Ibid.

<sup>3</sup> Muncke, J, Endocrine disrupting chemicals and other substances of concern in food contact materials: an updated review of exposure, effect and risk assessment, J Steroid Biochem Mol Biol (Oct 2011)

<sup>4</sup> IPEN, "Toxic Loophole: Recycling Toxic Waste into New Products" (2018).

<sup>5</sup> CIEL et al., "Plastic & Climate: The Hidden Costs of a Plastic Planet" (May 2019).

<sup>6</sup> Derived from daily estimates of the rates of emission in Jambeck et al (2015) and rates of production in above graph.

### The Solution

As established by UNEP's own expert assessments<sup>7</sup> and additional independent analyses<sup>8</sup>, the existing global policy framework is fragmentary and cannot adequately respond to the global plastic pollution crisis in its current form. It is unable to remedy with enough urgency the immediate harms being caused along the full lifecycle and supply chain of plastics.

The severity of the plastic pollution and marine litter crisis requires the development, implementation, and integration of strong international, regional, and national programs which center around more than just the marine litter impacts of plastic. While national and regional coordination must be encouraged to ensure urgent action and effective implementation, the global policy framework should include legally binding targets for:

- ❑ **Reduction of production and consumption.** Measurable targets and controls must be put in place to limit the amount of plastics produced and restrict their applications. Plastics currently have no place in a genuinely circular economy, as they cannot be infinitely recycled and there is always leakage from both use and production, including *inter alia* toxicants, greenhouse gas emissions, and pre-production pellets.
- ❑ **Reduction of exposure to toxic chemicals.** Toxic substances and additives (e.g. flame retardants, bisphenols, phthalates, lead, mercury, dioxins, furans, and other POPs or EDCs) must be severely limited or eliminated from plastic production. Regulations must ensure that they will not be recycled into new plastic products, as any contamination by toxic chemicals further undermines a circular economy approach.
- ❑ **Exclusion of false solutions.** Incineration technologies like waste-to-energy and plastic-to-fuel must be recognized as environmentally unsound approaches to managing plastic waste, as they produce significant quantities of greenhouse gases, toxic air pollutants, highly toxic ash, and other residues. Downcycling activities (e.g. eco-bricks and plastic roading) involve the risk of toxic substances and additives leaching into the open environment, and alternative single-use materials, like bioplastics, do not address waste or toxicity concerns.<sup>9</sup> Solutions must focus on reduced production, reuse, refill, and truly circular mechanical recycling of non-toxic materials.
- ❑ **Investment in zero waste cities.** Proven models<sup>10</sup> of zero waste must be supported, including: community-based waste collection with source separation, organics management, and regulation of plastics, to progressively reduce residual wastes; implementation of reduction, repair, and reuse systems; and auditing of waste streams, especially residual or unmanageable wastes before they are transferred to a landfill.

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**UN Member States should thus demonstrate leadership by issuing an urgent commitment to undertake actions toward a new global governance agreement to address the full lifecycle of plastics.**

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<sup>7</sup> UNEP, "Combating marine plastic litter and microplastics: an assessment of the effectiveness of relevant international, regional and subregional governance strategies and approaches" (May 2018)

<sup>8</sup> Adelphi & Ecologic Institute, "No More Plastics in the Ocean" (Nov 2018), found at <https://bit.ly/2MFGszd>

<sup>9</sup> Zimmerman et al, "Benchmarking in Vitro Toxicity and Chemical Composition of Plastic Consumer Products", *Env Sci Tech* (2019)

<sup>10</sup> See more at [www.zerowastworld.org](http://www.zerowastworld.org)