

# GENEVA BEAT PLASTIC POLLUTION

*Outcomes of the Dialogues (November 2020 - February 2021)*



***The world is facing a plastic crisis.*** *The status quo is not an option. Plastic pollution has become a global concern that requires an urgent and international response involving all relevant actors at different levels. Over the past years, several major multilateral processes and global environmental negotiations have engaged in steps to address plastic pollution. This report presents the outcomes of the Geneva Beat Plastic Pollution dialogues, which aimed to build on this momentum and facilitate further engagement and discussion among the stakeholders in International Geneva and beyond.*

## Plastic Pollution in Multilateral Fora

### Plastics in Environmental Governance

For several years, plastic pollution has been a major issue raised at the UN Environment Assembly (UNEA). In 2017, UNEA-3 established the Ad-hoc Open-Ended Expert Group on marine litter and microplastics, whose mandate was extended at UNEA-4<sup>1</sup>. The expert group concluded its work ahead of UNEA-5 in 2021 and has put forward a series of possible policy responses to reduce plastic pollution in marine environments.

International negotiations on chemicals and waste have also recently integrated concerns about plastic pollution. In 2019, the Parties to the Basel Convention have adopted the Plastic

Amendments, which entered into force in January 2021 and now regulate transboundary transfers of plastic waste<sup>2</sup>. Discussions are also undertaken under the Stockholm Convention to ban or regulate some of the harmful chemical additives that are used in plastic products. Negotiations in these fora will continue at the next Conference of Parties of the conventions later this year and in 2022.

Plastic pollution could also be addressed under the Strategic Approach to International Chemical Management (SAICM). The Beyond 2020 framework which should be adopted at the fifth session of the International Conference for Chemicals Management (ICCM5) will be an important step in these discussions.

## Plastics as a Cross-Cutting Issue

As plastic pollution is a complex issue that goes beyond environmental concerns, it has been picked up as a matter of concern within a number of multilateral processes outside of the environmental community.

Governments at the World Trade Organization (WTO) are showing increased interest in how international trade policy can support efforts to tackle plastic pollution. An informal dialogue has been established to identify opportunities for enhanced trade cooperation on plastics<sup>3</sup>. The UN Conference on Trade and Development (UNCTAD) is also fostering research and policy dialogue on plastic pollution<sup>4</sup>. Plastics are also increasingly addressed within the world of standards, for instance within the International Organization for Standardization (ISO).

In the field of human rights, plastics have been raised as an issue within the Human Rights Council, as well as in relation to the right to information under the Aarhus Convention and the Escazú Agreement. As plastics can impact health and labour safety, the topic has also

discussed at the World Health Assembly and within the International Labour Organization.

These are only a few examples of the efforts underway at the international level to address plastic pollution, showcasing the growing concern and need for action from governments and institutions all over the world.

## The Geneva Beat Plastic Pollution Dialogues

The Geneva Beat Plastic Pollution dialogues aim to create synergies among the many actors in Geneva who are actively rethinking the way we manufacture, use, trade and manage plastics. The first series of dialogues, held between November 2020 and February 2021 in the run up to UNEA-5.1, highlighted efforts from inter-governmental organizations, States, businesses, civil society, scientists and individuals to address plastic pollution. The dialogues also presented pathways to support coordinated approaches that can lead to more efficient global decision making to comprehensively address plastic pollution.

## Impacts of Plastics on People and the Environment

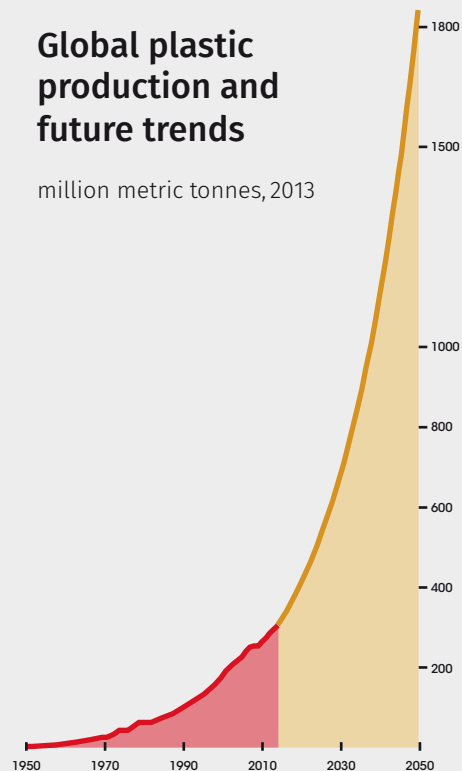
### An Overview of the Plastics Life Cycle

Annual global plastic production has exploded over the past decades, going from some 1.5m MT in 1950 to an astonishing 368m MT in 2019<sup>5</sup>. Under business-as-usual scenarios, this figure could reach up to 2'000m MT by 2050<sup>6</sup>. Our increasing reliance on plastic is problematic, as there is a growing body of scientific evidence of the negative impacts of plastics on the planet and the species that inhabit it, including humans.

Plastics are embedded in global and complex value chains, and each stage of the life cycle bears consequences for people and the environment. Although most public attention has been drawn to plastic waste and action to prevent leakage of microplastics and chemicals into the environment from inadequate disposal, addressing the end-of-life of plastic products will not be enough to solve this global crisis. Therefore, in order to get a full picture of the problem, one needs to consider the impacts of plastics and its chemical additives throughout extraction, manufacturing, use, and disposal.

### Global plastic production and future trends

million metric tonnes, 2013



Source: Rayan, A *Brief History of Marine Litter Research*. In Bergmann, Gutow & Klages. *Marine Anthropogenic Litter*. 2015.

## Plastics as One of the Drivers of Climate Change

Almost all plastics are produced from fossil fuel feedstocks<sup>7</sup>, and petrochemicals are expected to become the largest driver of global oil demand growth from now through 2030<sup>8</sup>. Plastics deeply impact our climate, as greenhouse gases (GHG) are emitted throughout their lifecycle, due to extractive activities, transport, manufacturing, and incineration of plastic waste.

GHG emissions from the plastic sector were estimated at 0.86 gigatons CO<sub>2</sub>-eq, the same amount as 189 coal plants running non-stop for a year<sup>9</sup>. By 2050, the plastic industry could eat up 10-13% of the global carbon budget needed to keep global temperature rise below 1.5°C.

Therefore, reducing plastic production and consumption is instrumental to achieving the goals set in the Paris Agreement and reducing the numerous risks and injustices associated with global warming.

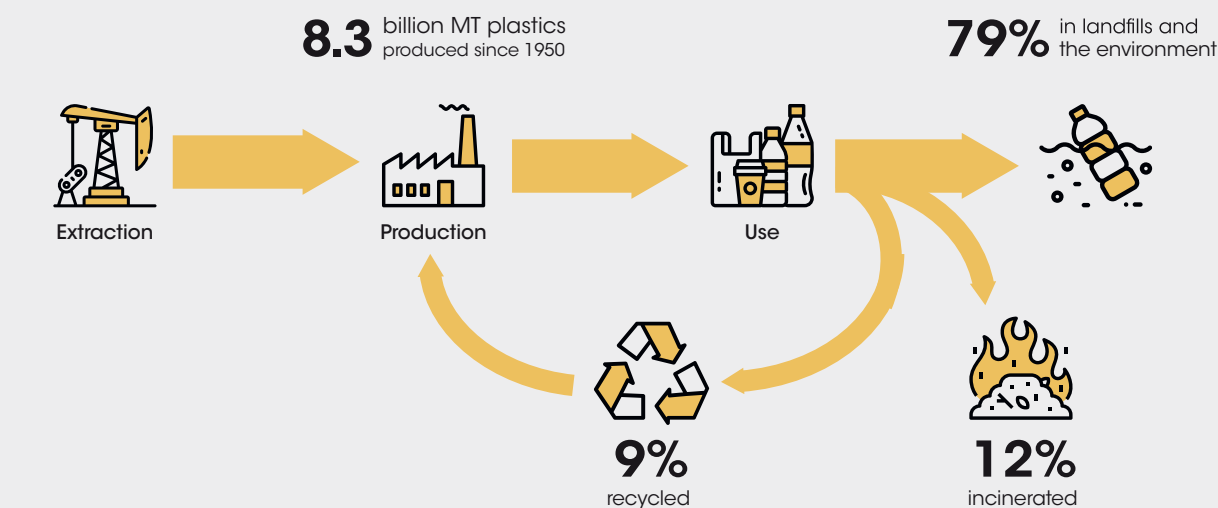
## Environmental Degradation

Significant environmental degradation occurs throughout the plastics life cycle. Extraction, fracking, and the production of plastics and chemical additives release substantial amounts of toxic substances into the air and contaminate the local environment<sup>10</sup>.

Disposal is also problematic: incineration of plastic waste releases toxic chemicals and micro- and nano-plastics into the air<sup>11</sup>, while landfills contaminate soil and water<sup>12</sup>. Even recycling processes can lead to additional air pollution and leakage of chemicals into the environment<sup>13</sup>.

Although contamination is often localized, pollution easily spreads around the globe through air and oceans streams, leaving no place unaffected by plastic pollution<sup>14,15</sup>. Plastic pollution threatens ecosystems, animal and plant species, impeding their ability to deliver essential services to humanity<sup>15</sup>.

### The plastics life cycle and its impacts on people and the environment



Source: Geyer, Jambeck & Lavender Law. *Production, use, and fate of all plastics ever made*. Sciences Advances. 2017.

## Health Risks

Science has confirmed that people are constantly exposed to plastics through daily life products, but also through the food chain as well as airborne plastic pollution. While plastics accumulate in agricultural soils, terrestrial and aquatic food chains, estimates show that an average person ingests as much as 5,5 grams of microplastics per week<sup>16</sup>.

Research also revealed that microplastics can harm our health, and act as vessels for pathogens to enter our system, increasing the spread of diseases<sup>17</sup>. Additional health risks arise from the endocrine-disrupting chemicals (EDCs) added in plastics, which affect the neural, reproductive and immune systems, and increase the risks of cancer, diabetes, and other health conditions<sup>18</sup>.

Health risks are also present in the upstream of the life cycle, as extraction and production significantly affect the health of workers and local communities<sup>19</sup>. Finally, plastics contribute to the numerous health risks associated with warming temperatures and extreme weather events due to climate change.

## Human Rights Infringements and Environmental Injustices

Plastics greatly impact the enjoyment of various human rights<sup>20</sup>, including the right to health, as the previous section highlighted. Additionally, the right to science and information are infringed upon, as misinformation campaigns led by some actors of the plastic industry have hidden the true cost of plastics. Due to long-lasting environmental degradation and climate change, plastics also impact the rights of future generations.

The social and environmental cost of plastics is unevenly distributed around the globe and among social groups. Vulnerable groups, such as children, poorer communities and small island developing States, are disproportionately impacted<sup>21</sup>.

Meanwhile, traditional approaches to regulate environmental issues often overlook issues of environmental justice and access to remedies. Current responses to address plastic pollution face this limitation, underscoring the need for a human rights based approach.

# Addressing Plastic Pollution: the Way Forward

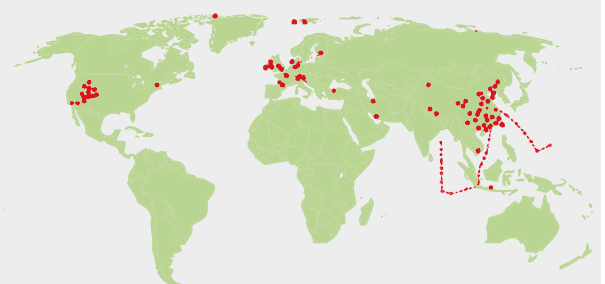
## Support Science for Policy Making

In order to develop effective responses, decision-making must be informed by science. The current state of research provides enough evidence to start acting on plastic pollution; however, many aspects of the plastic crisis are still underresearched. Therefore, the production of further knowledge, assessments and data is an essential step, for which additional funding and support is warranted.

Deeper understanding of the problems at hand should be acquired by exploring evidence in various fields, including but not limited to characteristics of the plastic economy, trade flows and subsidies, airborne and water pollution, as well as impacts on health, climate change, and environmental injustices.

Further efforts to disseminate and effectively communicate existing science on the impacts of plastics is also required to uphold the right to information, build momentum toward action, and support informed policy making. Finally, science is essential to develop solutions, for instance with regards to plastic substitutes, circular design, standards, waste management and recycling technologies.

### Studies of atmospheric microplastics found traces in every sample tested



Source: Zhang et al. *Atmospheric microplastics: A review on current status and perspectives*. 2020.



## Transform the Plastic Economy

Our ability to transform the plastic economy is a central piece of the solution to plastic pollution. Steps need to be urgently taken to end the use of single use plastics<sup>22</sup> and the development of new oil, gas and petrochemical infrastructure<sup>7</sup>, as well as to promote refill and reuse business models, non-plastic substitutes, circular design, and environmentally sustainable waste management technologies<sup>23,24</sup>.

A wide variety of policy instruments, from regulation to voluntary schemes, can be harnessed to achieve these goals. Regulatory frameworks should be designed to incentivize innovation and more sustainable production and consumption. In that regard, well-designed extended producer responsibility schemes can improve waste management while fostering accountability. Removing the environmentally harmful subsidies along the plastics value chain would also help shifting the economy away from plastics.

Trade policy can contribute to global efforts on plastics by removing tariffs and non-tariff barriers for non-plastic substitutes and better waste management technologies. Harmonizing standards and labeling systems on plastics can further support improved design, recyclability, and the uptake of alternative materials and business models – bearing in mind that voluntary standards need to be combined with ambitious regulatory frameworks.

In the development and implementation of these instruments, working on comprehensive solutions and avoiding silos is essential. In order to come up with successful responses, the effective participation of all stakeholders in the design and implementation of instruments is required. Constructive dialogue needs to be fostered with governments, the private sector, civil society, the scientific community and international organizations.

Additionally, responses should integrate human rights and environmental justice concerns, for instance by supporting effective participation of vulnerable groups and affected communities, and ensuring liability and mechanisms of compensation for harm. Finally, monitoring and reporting needs to be developed and enforced, to ensure positive outcomes and information sharing.

## Establish a Global Agreement on Plastics

The global nature of the plastic economy and its impacts calls for an international coordinated response<sup>25</sup>. Thus, fostering robust international cooperation regimes that address the impacts of plastics throughout its life cycle is a priority. While plastic pollution is gaining momentum in international fora, as presented previously, current governance responses are fragmented, uncoordinated and mostly focus on plastic waste.

Existing legally binding instruments and voluntary partnerships create opportunities to progress in the global efforts against plastic pollution. For instance, further work under the Basel and Stockholm Conventions can reduce plastic leakage into the environment through improved waste management and regulate hazardous chemicals<sup>26</sup>.

Several other international fora can contribute to the global efforts to combat plastic pollution, while working in a coordinated manner to avoiding duplicating efforts. For instance, suggestions on international trade policy on plastics have been put forward and reveal the role that WTO could play on the issue<sup>27</sup>.



While these various progresses are welcomed, they fall short of providing a comprehensive framework to address the plastic crisis. Many member States, civil society organizations and businesses have called to start negotiations in view of a new legally binding instrument<sup>28,29</sup>. A global agreement on plastics would allow to move beyond the current fragmented global response. This new agreement would address the full life cycle of plastics with the aim to enhance cooperation between countries to reduce plastic pollution worldwide<sup>30</sup>.

A global agreement on plastics should become a tool that enables each country to face the plastic crisis within its own context and constraints. Thus, it should include finance mechanisms, provide assistance to developing countries and foster capacity building<sup>30</sup>. Such an agreement should also remain flexible due to the diversity of national contexts. Finally, several proposals have put forward the core role that standards could play in structuring a global framework<sup>31</sup>.

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# Resources and Information

-  More information on the Geneva Beat Plastic Pollution Dialogues
-  Resources and regular updates on plastics and the environment



## Thematic Outcomes

- Plastic and Waste
- Plastic, Climate and Air Pollution
- Plastics and Human Rights
- Plastics and Health
- Plastics and Standards
- Plastics and Trade
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