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Written submission – The potential options for elements towards an international legally binding instrument

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Date	13-01-2023

I. Substantive elements

1. Objective(s)

Proposed Objective: The objective set out in the instruments should be to end plastic pollution in all environments and achieve an environmentally just, non-toxic, low-emission, and resource-efficient circular economy for plastics. A circular economy that stays well within the existing non-crossed planetary boundaries, works to remediate issues where thresholds have already been passed, protects human rights for affected communities, and ensures a just transition for people in vulnerable situations. This should be done by addressing the full lifecycle of plastics. That is, everything from the extraction and processing of raw materials, the production of petrochemicals, and the polymerization process to the design and use of plastic products, the management of plastic waste, and the leakage of plastics into the environment.

Explanatory Text: All of these phases in the plastic lifecycle, contribute to different types of pollution and GHG emissions and are related to human rights violations in several ways. These include violations of the right to life, health, a toxic-free environment, information, participation, and access to effective remedy. For this reason, the plastic lifecycle should be defined as including every step from the extraction of raw materials and production of plastic polymers to the creation and management of plastic waste as well as the leakage of plastics into the environment. In terms of ensuring a just transition for people in vulnerable situations, the case of waste pickers is cardinal. Moving forward, waste pickers should be guaranteed an environmentally just transition. This begins with recognizing their continuing role as workers providing a civil service by playing a valuable part in local waste management. Waste pickers should receive fair compensation, be guaranteed a right to work within the circular economy for plastics, and be included in social welfare programs. Moreover, hazardous materials and substances should be phased out to ensure their safety.

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2. Core obligations, control measures and voluntary approaches

A multilateral instrument should address the extraction of raw materials for the production of virgin polymers, establish a cap on global plastic production and consumption and put down bans and/or restrictions on problematic plastic polymers and products. As was put forward by several member states during INC-1, virgin plastic production and consumption have reached unsustainable levels. Scientists and experts argue that plastic pollution should be tackled at source, regulating, capping, and phasing-out the production of new plastics[1]. In addition, several testimonies from observers were given that plastics have adverse effects on human health and the environment as early as from the point of raw material extraction. Petrochemical products such as virgin plastic polymers will soon become the world's largest driver of oil demand, ahead of heavy goods vehicles, aviation, and shipping.[2] By effect, the contrast between how much plastic is produced and how much is recycled is sharp. In 2015, only 9% of all plastic waste ever produced had been recycled. In comparison, 79% had ended up in landfills or the natural environment[3]. As such, the treaty should address both the extraction of raw materials and global plastic production and consumption.

When designing an upstream global regulatory framework for addressing plastic pollution, obligations and measures on the extraction and processing of raw materials and petrochemical production should be considered. These could include general obligations for parties to take legislative steps towards eliminating subsidies for fossil fuels and petrochemicals utilized in the production of virgin polymers as well as reporting measures for parties to disclose information on the origin of raw materials used to produce plastic polymers. Among other things, a well-designed reporting mechanism could provide access to the data necessary to establish a baseline and a cap on the extraction of raw materials and the production of petrochemicals used in plastic production. Going back to the overall design of an upstream global regulatory framework for addressing plastic pollution, obligations and measures should also target plastic production and consumption in itself. This could be done by capping plastic production and consumption from the point of polymerization. Here, the Montreal Protocol on Substances that Deplete the Ozone Layer serves as a useful starting point. The plastics treaty should employ a start-and-strength mechanism, allowing for control measures to be adjusted over time via decisions of the Conference of Parties. That is, without additional amendment or ratification as this will slow the process down. A start-and-strength mechanism includes a clear definition of controlled substances, reporting from Parties (similar to Article 7 in the Montreal Protocol), licensing systems, baselines, non-party trade provisions, and chemical restrictions. Based on these provisions, parties adopt restrictions on the annual production and consumption of controlled substances. [4]To end plastic pollution, the plastics treaty should first freeze plastic production and consumption at a certain level by making a cap based on an agreed baseline, and then start to gradually phase-down production and consumption by taking a series of reduction steps. In addition, problematic and hazardous virgin plastic polymers such as polyvinyl chloride (PVC), polystyrene (PS), polyurethane (PUR), and polycarbonate (PC) should be phased-out.

The treaty text should aim to introduce more and scale up existing reuse systems.
Reuse measures are a vital part of overcoming plastic pollution throughout the lifecycle of plastics. Constituting a large part of overall plastic consumption, this is especially true where plastic pollution

[1] https://www.science.org/doi/10.1126/science.abq0082
[2] https://iea.blob.core.windows.net/assets/bee4ef3a-8876-4566-98cf-7a130c013805/The_Future_of_Petrochemicals.pdf
[3] https://www.science.org/doi/full/10.1126/sciadv.1700782
[4] https://eia-international.org/wp-content/uploads/Essential-Elements-Production-Consumption.pdf

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is linked to packaging. Almost 40% of all plastic is used in the packaging sector. Reuse is placed higher in the waste hierarchy than recycling as it is a more resource-efficient approach. When compared to single-use packaging, the great majority of research shows that reusable packaging is the most environmentally friendly option.[5] To give an example, a recent study found that a reusable packaging target of 50% by 2030 in the EU take-away food and beverages, e-commerce, and cleaning detergents sectors would lead to significant reductions in both CO_2-emissions, water consumption, and material usage - 3.7 million tonnes of CO_2-equivalent, 10 billion cubic meters of water and 28 million tonnes of material usage.[6] While bans can be effective, they sometimes lead to substitution. This comes with a risk as all finite materials constitute an environmental burden. Single-use products made from alternative materials (e.g. biobased or compostable plastics, aluminum, glass, paper) are often unsustainable. What needs to be addressed, is the linearity of our consumption model. That is, we need to move away from single-use culture and towards a more circular economic model. In this regard, reuse and reuse systems is a key part of the solution.

A reuse system is not an individually owned refillable item but a system typically provided by the business selling the item. Existing reuse systems can provide guidance on how to introduce or scale up reuse. A prerequisite for effective large-scale reuse systems is consistent and uniform legislation. This legislation should include precise definitions and correct labelling needs to be in place, binding reuse targets with sanctions to incentivize implementation, 'pooling systems' with standardized packaging (See e.g. the German pooling system Genossenschaft Deutscher Brunnen (GDB) (German only) that successfully manages 1 billion bottles and 100 million crates) as well as financial incentives and favorable economic structures such as deposit return schemes, taxes levies and extended responsibility systems[7]. In terms of product design standards for reusable packaging, clear design criteria should be set not only on durability and eco-design but also on material composition and safety. This includes placing restrictions on certain polymers and additives of concern. Such criteria can be supported in the global policy framework through clear guidance on plastic production reporting and material transparency. As reuse is unlikely to be assigned a dedicated negotiation track, it should instead be a key consideration in discussions on product design, sustainable production and consumption of plastics, financing, National Action Plans, and the informal sector (read more here).

A multilateral instrument on plastic pollution should take the necessary steps towards phasing out toxic chemicals in plastics, including addressing all relevant chemicals across the lifecycle and ensuring full transparency of the chemical composition of plastics. As pointed out by a group of leading scientists in a joint letter, it is paramount that all relevant chemicals in plastics are addressed in the multilateral instrument to end plastic pollution, not only in terms of hazardous additives and downstream plastic waste. Prior to INC-1, the scientist learned that the scientific understanding of chemicals in plastics currently displayed in the INC documents was too narrow. Plastics are complex materials with up to 60% chemicals (measured by mass). Chemical mixtures include polymer additives, residual monomers, processing aids, and non-intentionally added substances. Out of more than 10.000 different chemicals used in plastics, at least 2400 of these are known to be toxic. These are released into the environment throughout the plastic lifecycle – from extraction and processing of raw materials, the production of petrochemicals, and the polymerization process to the design and use of plastic products, the management of plastic waste, and the leakage of plastics into the

[5] https://zerowasteeurope.eu/wp-content/uploads/2020/12/zwe_reloop_report_reusable-vs-single-use-packaging-a-review-of-environmental-impact_en.pdf.pdf_v2.pdf
[6] https://rethinkplasticalliance.eu/wp-content/uploads/2021/07/Realising-Reuse-Final-report-July-2021.pdf
[7] https://eia-international.org/wp-content/uploads/Essential-Elements-Reuse-SINGLES.pdf

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environment. Documented human health effects are premature births, low birth weight, obesity, diabetes, cardiovascular disease, endometriosis, infertility, and cancers. Going forward, member states should take into consideration that plastics are complex chemical mixtures and attend to all relevant chemicals across the entire lifecycle of plastics[8].

Another but equally important point is that transparency is a prerequisite for a just and non-toxic circular economy for plastics. In 2021, the UN Special Rapporteur on the implications for human rights on the environmentally sound management and disposal of hazardous substances and wastes, called on all actors in the plastic value chain to disclose the full chemical composition of plastics. The reason for this was that toxic chemicals in the lifecycle of plastics constitute a threat to several human rights, including the right of women and children, workers, and indigenous people[9]. Closely connected to issues of both legal and illegal trade with plastic waste, toxic chemicals in plastics are a globalized problem, disproportionately affecting developing countries. In most cases, especially in countries in the Global South receiving large amounts of low-quality plastic waste, the potential economic benefits of plastic waste trade are overshadowed by the obvious disadvantages, such as the adverse health effects caused by the toxic chemicals in plastic.

A way forward could be based on the already proposed Global Minimum Transparency Standard (GMTS) concept, promoting globally harmonized transparency for chemicals of concern. In terms of identifying chemicals of concern, it would make sense to start with those already regulated in the Stockholm Convention, Basel Convention, Rotterdam Convention, and EU Substances of Very High Concern In addition, transparency of information about the chemical content of plastics should contain the disclosure of mono- and polymers and chemicals that cause epigenetic interferences. This would significantly improve the ability of actors along the whole lifecycle of plastics to take informed decisions. All information should be centralized and public. A useful example in this regard is the SCIP database, developed by the European Chemical Agency to provide information transparency to manufacturers, consumers, and recyclers. By extension, information could be passed on in the form of a product passport or similar (Read more here).

Intentionally added microplastics should be banned or heavily restricted. Nano- and microplastics are everywhere. On the bottom of the sea, in the snow on the tallest mountains, in the air we breathe, the food we eat, and in our bodies – In the placenta of pregnant women and our blood[10] [11] [12] [13] [14] [15]. FAO's assessment of agricultural plastics from 2021 also goes to show the extent to which plastics are being used in farming practices[16]. The release of micro- and nanoplastics to agricultural soil is up to 23 times that released to oceans, in part because plastics are used in some pesticides, seeds, and fertilizers.[17]. To add to this, studies show that micro- and nanoplastic can penetrate plant

[8] https://www.science.org/doi/10.1126/science.adf5410
[9] https://documents-dds-ny.un.org/doc/UNDOC/GEN/N21/201/78/PDF/N2120178.pdf?OpenElement
[10] https://royalsocietypublishing.org/doi/full/10.1098/rsos.180667
[11] https://www.cell.com/one-earth/fulltext/S2590-3322(20)30550-9
[12] https://www.biorxiv.org/content/10.1101/2021.01.25.428144v1.full
[13] https://www.nytimes.com/2018/10/22/health/microplastics-human-stool.html?smid=fb-nytimes&smtyp=cur&fbclid=IwAR1IysBn7v0YFN9q6kdw_o2JsxpMOWZvRC2FXlNaJgdE3Kz0YTYT7ZkikK8
[14] https://www.sciencedirect.com/science/article/pii/S0160412020322297
[15] https://www.telegraph.co.uk/environment/2022/03/24/microplastics-discovered-human-blood-first-time/
[16] https://www.fao.org/3/cb7856en/cb7856en.pdf
[17] https://www.sciencedirect.com/science/article/abs/pii/S0048969717302073?via%3Dihub

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roots, polluting crops[18]. The scientific community is yet to determine the exact effects of this on human health but an increasing amount of evidence shows that the consequences may be severe. Therefore, the precautionary principle must be applied when designing a global regulatory framework on nano- and microplastics.

Several national and regional policies restricting the use of certain intentionally added microplastics already exist. In Ireland, microplastic in all cosmetic products and cleaning agents was banned in 2019, with only a few exceptions such as medicinal products[19]. Similarly, the EU is currently working to ban plastic infill in artificial grass. Microplastics used for infill typically stem from old car tires, consequently containing large amounts of toxic chemicals. Moreover, alternatives such as sand and other organic materials that do not threaten human health or the environment are readily available. Such examples should inform decisions made by negotiators. A multilateral instrument on plastic pollution must ban or heavily restrict the use of all intentionally added microplastics globally[20].

The plastics treaty should serve as an umbrella framework for the adoption and implementation of a comprehensive global approach to ghost gear. Abandoned, lost, or otherwise discarded fishing gear, also known as ghost gear, is a major contributor to marine plastic pollution. 46% of the floating marine debris in the Great Pacific Garbage Patch is ghost gear. Ghost gear can entangle and kill threatened and protected marine animals and commercially important fish species. It can also damage reefs and the seabed, and, if surfaced, it can be hazardous for different marine activities. Resolution 5/14 mandates the development of national and international cooperative measures to reduce plastic pollution in the marine environment. Several international environmental agreements and regional bodies and conventions as well as complementary initiatives touch upon plastic pollution. Despite these efforts, the existing international and regional governance is fragmented and ineffective. The delineation of responsibilities and authority among the multilateral environmental agreements themselves as well as with regional bodies and conventions is unclear. At the regional level, more cross-regional coordination and harmonization are needed. This can in large part be explained by the fact that the above measures were not designed to tackle ghost gear, and so to deliver on the 2030 Agenda Sustainable Development Goal 14.1. more is required.

What is needed is a comprehensive legal framework coordinated globally and implemented nationally, regionally, and/or internationally. To this end, a multilateral instrument on plastic pollution should serve as an umbrella framework for the adoption and implementation of a comprehensive global approach, establishing joint working groups to clarify respective roles and knowledge-exchange networks where cross-regional coordination is needed. This could be done by putting in place a single forum to oversee a comprehensive body of work to discuss and promote measures across the full lifecycle of fishing gear. Such a forum should build on regional frameworks (Regional Fisheries Bodies and Regional Seas Conventions), allowing them to fulfill their role as intermediaries between international commitments and national action. It should function as a clearinghouse for data gathering and monitoring and as a platform for scientific assessment and knowledge exchange. While also providing a venue to convene states, secretariats, and stakeholders

[18] https://www.sciencedirect.com/science/article/pii/S026974912100765X
[19] https://www.irishtimes.com/news/environment/making-and-selling-of-products-containing-microbeads-banned-1.4125431
[20] https://eia-international.org/wp-content/uploads/EIA-report-Convention-on-Plastic-Pollution-single-pages-for-print.pd

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to discuss emerging issues as well as to coordinate funding and capacity-building (See list of potential measures for a global strategy on ghost gear in Annex I and II of EIAs paper on fishing gear).

While upstream measures should take prevalence, a multilateral instrument on plastic pollution also needs to address issues of legacy pollution. Current remediation efforts are mostly uncoordinated, ineffective, and unequipped to deal with the scale of the problem. An instrument on plastic pollution should require Parties to develop and implement plans to remediate plastic pollution in the environment that poses a risk to local communities, biodiversity, fisheries, health, tourism and navigation, and maritime safety. To this end, protocols and guidelines for identifying, prioritizing, and remediating plastic pollution in the environment in an environmentally sound manner should be developed.

In more general terms, treaty provisions should be followed up by control measures, not rely on voluntary approaches. Progress should be measured through a combination of economic and environmental indicators, instituted through national reporting (bottom-up) and environmental monitoring (top-down) (see II 1).

On the subject of a financial mechanism, resources should be allocated in a coordinated, predictable, and effective manner. Here, the Montreal Protocol on Substances that Deplete the Ozone Layer may be able to provide some guidance (see II 2).

II. Implementation elements

1. Implementation measures

Progress should be measured as a combination of economic and environmental indicators through both national reporting (bottom-up) and environmental monitoring (top-down).
National reporting in terms of National Action Plans, more appropriately referred to as plastic pollution reduction plans, should provide statistical data at each stage of the lifecycle of plastics, including on the extraction of raw materials used to produce polymers, virgin pellets and resins, recycled plastic production and consumption, plastic use by market segment, reuse systems, and plastic waste management, plastic waste trade, sea-based sources of plastic pollution, primary microplastics and additives (Read more here). A new global reporting framework for plastic pollution with methodologies for calculations and standardized definitions and formats, setting out clear obligations and annual timeframes should be developed early in the process. Parties should be expected to communicate their plastic pollution reduction plans as part of their commitments under the treaty, report on implementation over a specified timeframe, and review and update them periodically. An important aspect in this regard is early investments and support to ensure a regular and systematic approach as well as the necessary capacity-building and training. In addition, the secretariat should be empowered to assist the data-gathering process as needed, in close cooperation with implementing and bilateral agencies. Environmental reporting should allow us to identify a range of environmental and human health impacts, including plastic pollution in the biosphere, bioindicator species, and exposure risks and thresholds (Read more here). Standard approaches for monitoring and common methodologies for measurements should be agreed upon as soon as possible. Coordination and collaboration with scientific experts such as the GESAMP and relevant entities such

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as the regional seas programmes and conventions as well as the Food and Agricultural Organization of the United Nations are important.

Concerning the relationship between the treaty and the scientific community, a dedicated scientific body should be assigned to the treaty. The dedicated scientific body should be tasked with supporting the achievement of the treaty's objectives and the needs of its governing body. As is the case with IPCC and IPBES, the dedicated scientific body should complement independent science-policy panels such as the one established in UNEA Resolution 5/8 on chemicals and waste. This approach has two overall advantages. Firstly, the dedicated scientific body can respond directly to treaty-related issues, allowing it to quickly adapt to new information and remain applicable with regard to the treaty. Secondly, the independent science-policy panel can move more freely, ensuring topical analyses of cross-cutting relevance. In more general terms, the science-policy interface should ensure validity by selecting experts from all relevant disciplines, including holders of indigenous and traditional knowledge.

2. Means of Implementation

The plastics treaty should include a mechanism to provide financial support to developing countries and economies in transition to assist with implementation and compliance. In terms of financial support in MEAs, resources can be divided into two different categories: Enabling activities – that is, activities necessary to further compliance (capacity-building and training, policy development, monitoring and reporting, institutional strengthening, and pilot and demonstration projects) - and incremental costs - that is, agreed cost relating to complying with new commitments. Another relevant aspect is sustainable financing, here taken to mean economic or fiscal measures adopted by local and national governments to finance plastic waste management (fees, deposit refund schemes, extended producer responsibility systems, plastic taxes and levies, advanced disposal fees, green public procurement and policies promoting secondary markets for recycled materials).

A multilateral instrument on plastic pollution should entail a financial mechanism that combines multiple sources of funding and ensure the operationalization of the polluter-pays principle. In order to achieve lasting and environmentally sound plastic waste management, it needs to become self-sufficient at the local and national levels. As such, it should be financed primarily by the economic actors profiting from plastic use. To this end, sustainable financing must be attained by way of municipal and national governments adopting economic and other fiscal measures. When allocating financial resources – enabling activities and/or incremental costs - the financial mechanism chosen to deliver them is of great importance. On this subject, the Montreal Protocol on Substances that Deplete the Ozone Layer may provide a useful example. Widely considered one of the most successful multilateral environmental agreements, in large part because of its financial mechanism, the Montreal Protocol applies a dedicated multilateral fund. Generally, significant resources are and should continue to be dedicated plastic pollution issues. Most importantly, the treaty should ensure that these resources are directed and delivered in a coordinated, predictable, and effective manner.

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III. Additional input

Generally, a multilateral instrument on plastic pollution should be guided by the Waste Hierarchy, the Precautionary Principle, and the Polluter Pays Principle.

As put forward in the Global Commitment 2022 progress issued by the Ellen MacArthur Foundation, voluntary measures are insufficient to change the status quo. While approx. 50% of business signatories have decreased their use of virgin plastic in packaging, overall use among the group has not changed since 2018.[21]For this reason, obligations and measures in the plastics treaty should be legally binding.

[21] https://ellenmacarthurfoundation.org/global-commitment-2022/overview