Call for written submissions – Response on the potential options for elements towards an international legally binding instrument

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Introduction

Zero Waste Europe has been working on policies and measures targeting plastic pollution since the early 2000s and has done extensive research, movement building, policy advocacy and implemented zero waste solutions since then. Currently Zero Waste Europe works in the fields of eco-design (including the elimination of hazardous chemicals), prevention, reuse, collection, sorting, recycling, chemical recycling, incineration, landfilling and trade of plastic waste and this contribution is building on this expertise.

Overall objective (goal)

Proposed overall objective:

To end plastic pollution by ensuring that plastic is produced, used, recycled and disposed of in a way that is compatible with the planetary boundaries and human health.

A key aspect for the success of the instrument is to define the boundaries of the exercise to stop plastic pollution. Currently plastic is 99% sourced from fossil fuels. Therefore, the environmental, health and social impact associated with plastic pollution stems from the extraction of these fossil fuels, throughout refining processes, resin and polymer manufacturing as well as product use, reuse, recycling and disposal. In order to address plastic pollution in a holistic way and make plastic compatible with life on earth, action has to take place at all levels of the supply chain, from extraction to end-of-life and involve all the major sectors using plastics: packaging and single-use items, textiles, built environment and automotive. Within this scope of work, the instrument can pursue three objectives to address plastic pollution:

Objective 1: Ensuring coherence and mutual reinforcement between plastic and other UN goals and processes.

As a principle, the use of any resource should take place within planetary boundaries and global agreements should reinforce or, at the very least not undermine each other.

Plastic production, use and disposal is currently overstepping many planetary boundaries (Villarubia-Gomez et al, 2022) and yet most of them do not have a legally binding cap. The most prominent and binding international legislation on system boundaries is the Paris climate agreement. The IPCC's 2021 Sixth Assessment Report (AR6) estimates that there is a 67% chance of global warming staying within 1.5°C of pre-industrial levels if cumulative global greenhouse gas (GHG) emissions stay below 400 GtCO2e. Current trajectories suggest that this budget will be depleted within the next 10 years if growth rates are maintained. Emissions from the material production sector – resource, extraction and processing of raw materials – currently comprise 25% of global emissions and the industries with the highest contribution (78%) to this sector are aluminium, concrete, steel and plastics. The published industry plans for net zero by 2050 in the materials sector are unlikely to be enough to limit warming to 1.5°C. The plastics industry currently does not have a roadmap to net zero, but the latest projections suggest a trajectory of 2.2°C, even with aggressive decarbonisation – including the most ambitious global recycling scenarios (Is Net-Zero enough for the material production sector? 2022).

According to recent research, in order to comply with the Paris agreement of 1,5°C warming, the use of plastics would need to decrease by 75% globally. This reduction should be more abrupt in industrialised countries, probably going as high as 90% reduction in plastic use whereas the global south could aim at reducing less. In either case, modelling shows that the industry projections of 4% yearly growth for the plastics sector should be replaced with caps that lead to a global reduction of yearly 3% in order to stay within the 1,5°C warming.

The impact of plastic pollution on human health and environment occurs during the extraction of oil, coal or gas, during the refining and polymerization process, during the manufacturing of products and packaging and in the end-of-life processes.

Yet, the Global Plastic Treaty (GPT) has so far implicitly tackled single-use plastic, amounting to around 40-50% of total plastic production, leaving unaddressed the important impact of plastic pollution originated from other sectors such as textiles, built environment, automobile and any other sectors using plastic. Therefore, if the treaty is to address plastic pollution as a whole it will need to set strong caps for plastic production, which should include sector-specific caps depending on how essential plastic is.

Implementation measures to ensure coherence between the GPT and the UNFCCC agreement:

- A clear definition of plastic pollution which includes the impacts on human health and environment of plastic production, use, reuse, recycling and disposal.

- A reference to the need to circumscribe plastic use to the planetary boundaries set by the UNFCCC as well as further explore others such as biodiversity or water use and include them when there is enough evidence.
- Global reduction targets of production/use of plastic consistent with the boundaries set by the UNFCCC:
    - 30% by 2030,
    - 60% by 2040,
    - 75% by 2050.
- Alignment of global reduction targets with national ones (those who use more plastic need to reduce more than those who don't).
- Clear definition of what is considered to be "*essential use"* of plastic (including availability or lack of alternatives) in order to inform the distribution and use of the available plastic budget.
- Immediate global ban of those polymers which are either not technically or economically recyclable or which have particular toxic impacts and for which alternatives exist.

Means of implementation:

The GPT can be one of the pillars of implementation of the Paris agreement. However, reducing plastic use at 3% per year will require a radical rethinking and reorganising of how the world economy works; today most packaging or textiles are made of plastic and many key sectors depend on synthetic resins to function. Bringing plastic production down to the levels compatible with a habitable planet is a challenge of the scale and ambition of the climate agenda and for this transition to happen it's necessary that:

- The creation of a global baseline for plastic production, use and recycling is mandated by the GPT and monitored by UNEP.
- Global sustainability standards that make non-toxic plastics part of a circular economy are created.
- Countries align in creating common standards for tracking chemicals in plastic materials (which would help increase safe use and the life of plastic materials, and increase the likelihood that plastics can be safely recycled).
- National baselines are created and connected to the global baseline.
- Transparent national action plans to reduce plastic use as requested by the GPT are created and monitored.
- Manufacturers should be registered in a global database and should provide data in order to have access to the market.
- Global and national authorities set up mechanisms/tools so that industry sectors using plastic can negotiate the priority uses for the available plastic.
- UNEP is charged with the role of overseeing the implementation of the reduction strategies at national level and per industrial sector.

Objective 2: Moving away from disposability

Half of the plastic produced is used for single-use products and packaging which is mostly not recyclable and not economically viable to collect. PET is the most recyclable and recycled polymer in Europe and still only 17% of what is placed in the market is effectively recycled back into bottles, and no recycled content is left after the 3rd cycle. If state of the art Deposit and Return Systems (DRS) and eco-design are implemented, a max of 75% recycled content could be achieved but after 10 cycles no recycled PET would be left in the bottle (How Circular is PET? Eunomia 2022). The fact is that the most common polymer out there is not very circular and other polymers are in an even worse situation. If this is true in Europe, the continent with the biggest recycling infrastructure, the situation in the rest of the world is even more challenging.

Given the limited plastic budget and following the definition of *essential use*, it is key to set up systems and infrastructure to collect and recycle plastic, that factor-in the fact that most single-use plastic will need to be phased-out and replaced with non-disposable options. For packaging this means replacing single-use with prevention and reuse options (Packaging prevention vs packaging reuse, ZWE 2022) whereas for textiles it means redesigning business models to end with overproduction and release of microfibers to the environment.

Implementation measures to move away from disposability:

- Create definitions of packaging plastic packaging prevention, plastic packaging reuse, pool systems, open reuse system, closed reuse system (The need to set essential criteria for setting up managed pool systems 2022).
- Extended Producer Responsibility (EPR) schemes which include full-cost coverage, ecomodulation linked to achieving reduction and reuse targets, and which take into account the progressive phase-out of single-use plastic.
- EPR is applied to any type of plastic product or packaging: packaging, textiles, sanitary items, furniture, electronics, etc.

Measures supporting plastic packaging waste prevention:

- Set an overall packaging waste prevention target.
- Set a cap on the overall single-use packaging placed in the market.
- Apply levies/taxes on single-use packaging.
- Restrict the use of unnecessary single-use plastic packaging formats and for certain applications (e.g: sachets, pouches, nets, bags, trays, wraps on fruits and veggies, mini individual portions used on HORECA, as well as packaging for onsite consumption of food and beverages).
- Encourage or obliging retailers selling food, drinks, and non-hazardous cleaning products to accept that consumers bring their own container (duly washed container).
- Encourage online retailers to offer an 'opt-out' option for free-packaging delivery of products whose own packaging is already suitable for shipment.

Measures supporting packaging plastic reuse:
- Set an overall reuse target of 50% by 2030 for all plastic packaging placed on the market, thus sending a strong signal to all market sectors to kick-start the transition.
- Set sector-specific reuse targets or dedicated targets per packaging type (e.g: for the beverage, HORECA, retailer sector).
- Encourage deposit-return schemes (DRS) forreuse beyond beverage packaging.
- Define essential requirements for pool systems and provide guidelines on their set-up and operation (The need to set essential criteria for setting up managed pool systems)
- Set general parameters for standardising packaging design and return incentives across brands and companies in a way that enables sharing of container collection points, washing facilities, and logistics, including a minimum number of cycles (re-uses), labelling, digital tags (QR codes), reuse symbols, among other product design requirements.

Means of implementation:

- Development of guidance and standards for reuse packaging.
- Financial support for the construction of reuse infrastructure, with priority for the countries which are not yet locked in into a single-use model and can leapfrog this step (e.g.: through taxation and EPR schemes as detailed in the section below)

Objective 3: Build up the necessary new infrastructure

Today, the growth in plastics supply outpaces the build-up of collection and recycling infrastructure. Hence, next to reduction in plastics production and their diversity (i.e. limiting the number of polymers manufactured, including by banning those polymers that pose particular risks to human health and environment and/or are not recyclable), it is important to ramp up investments and roll-out of collection and recycling systems. The GPT should create the conditions and provide guidance for the *necessary infrastructure* to collect and manage any plastic product and packaging that enters the market. What is understood for *necessary infrastructure* is highly dependent on the future scenarios of plastic production and use i.e. if single-use plastic packaging is to be mostly phased-out, or if the production of some polymers is to be discontinued should have a direct impact on the *necessary infrastructure* for collection and recycling.

Given the limited plastic budget available, the non-essential characteristic of single-use packaging and its high literability potential there is a danger of building lock-in infrastructure with a high risk to become stranded assets. Recycling plants (including chemical recycling) will be necessary to close the plastics loop but the composition and volumes of plastic waste should be carefully analysed in this planning. For instance, tools such as EPR are useful to internalise costs that today single-use packaging producers are placing on society. However, EPR should be a temporary tool to organise cost allocation of waste management, factoring in an in-built phase-out strategy for disposable packaging. EPR has to be a tool to transition away from single-use packaging and not an excuse to enshrine plastic waste into the system.

When looking at infrastructure to manage and prevent plastic pollution the GPT needs to look into instruments to constantly analyse and assess the health impacts of production, use and recycling of plastic.

Measures supporting the build-up of the necessary infrastructure:

- Clear definition of recycling, differentiating between high quality recycling, closed-loop recycling and downcycling.
- Target of over 35% recycled content obligation for any new product made of plastic.
- Limit the use of compostable plastic packaging to concrete applications such as tea/coffee bags, labels for vegetables/fruits or lightweight carrier bags and provided they are compostable in industrial composting facilities (and provided the infrastructure for dedicated collection and treatment are in place).
- A taxation system penalising plastic production from virgin fossil-fuels which includes the use of the money raised to finance sustainable alternatives.
- EPR schemes designed to transition away from single-use packaging and into different forms of reuse within decades.
- Obligation to implement plastic sorting out of mixed waste (prior to disposal) (Sorting residual waste is necessary to mitigate climate change).
- In order to push for prevention , reuse and recycling, set up residual waste targets with a specific declining % for single-use plastic.

Means of implementation

- A global methodology to calculate and monitor plastic waste arisings, recycling and recycled content.
- UNEP in partnership with WHO to set up a global agency to monitor the impact of plastic use for food contact material as well as any other application which can endanger human health.
- Guidance on how to implement state of the art Deposit and Refund Systems in different local conditions.

Additional input - resources

Is Net-Zero enough for the materials sector?

Reusable VS single-use packaging: a review of environmental impact

How Circular is PET?

The need to set essential criteria for setting up managed pool systems

Ensuring safety in recycled content: ambition vs reality

Marrying safety with sustainability in food packaging

Climate impact of pyrolysis of waste plastic packaging in comparison with reuse and mechanical recycling

The need to sort residual waste to mitigate climate change

National best practices:

The Austrian federal law on refill quotas

France's law promoting bulk and reusable packaging

Ireland's plan on single-use and plastic packaging