



Submission to the INC process on plastic pollution

15 July 2022

Executive summary

GAIA recommends the following clusters of work for the negotiation process towards a global instrument on plastic pollution:

- **Cluster 1: Objectives, Definitions and Structure of Work** during INC1. Definitions may be updated in the course of negotiations during subsequent INCs.
- **Cluster 2: Institutional Framework** (including instrument structure and coordination with other institutions) during all INCs, to ensure it can be adapted to negotiations on measures
- **Cluster 3: Managing Production and Uses: Quantities, Polymers, Additives, Applications, Impacts** (including reporting, limits on total production, specific polymers, additives or applications) from INC1 or 2 onwards
- **Cluster 4: Design for Safe Reuse and Recycling** (including controls on toxics and multimaterial and other designs that obstruct toxic-free and climate-safe reuse or recycling, controls on polymers not locally recyclable) from INC2 onwards
- **Cluster 5: Environmentally-Sound Waste Management** (recovery & disposal taking the Basel Convention draft plastic guidelines into account, stronger safeguards against toxic pollution & harm to the climate where possible, protections for waste-pickers) from INC4 onwards
- **Cluster 6: National Action Plans** (focusing on reuse, local mechanical recycling capacity, and other waste management) from INC4 onwards

GAIA further recommends the following organization of work:

- **Negotiation time allocation should follow the waste hierarchy**, giving the priority to upstream limits on production and uses
- **Financial and interpretation support** should be made available in all negotiation spaces to with special attention to waste-pickers, fenceline and frontline communities and Indigenous and Traditional communities, and women.

(For more detail, see p.4).



Elements of instrument structure, key concepts, procedures, and mechanisms needed for an effective international instrument on plastic pollution include:

1. **A robust and coherent structure:** common definitions and methodologies, robust and binding transparency requirements, reporting and monitoring requirements, no deceptive accounting (no neutrality or credits), common scientific body, enforcement mechanism
2. **Cap, reduce and ban:** ambitious and coordinated common measures to “end plastic pollution” that can be implemented gradually with attention to industry and regional specificities
3. **Common binding standards for toxics limit levels and testing,** with specific emphasis on the risk of toxics concentration in recycle
4. **National Action Plans that:**
 - **support reuse** through infrastructure, resources and incentives, anchoring controls on plastics within the broader circular economy
 - **guarantee just transition for waste-pickers** and involve them in policymaking that affects their livelihoods
5. **Dedicated fund to support developing countries' compliance and action on legacy plastic and toxic pollution,** prioritizing environmental justice communities
6. **A subsidiary scientific body, free of conflicts of interest, that responds to queries and requests from the parties.** This body should incorporate both western science as well as Indigenous and traditional knowledge practitioners.

(For more detail, see p.4-6).



GAIA sees coordination with the **Basel Convention** on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention) as a priority, including:

- Recognizing the Basel Convention’s focus on waste-management and **focusing the new instrument on reducing plastic production and use** and other upstream measures
- **Harmonizing definitions** of plastic waste and waste-management operations in line with the Basel Convention
- At the same time, **excluding waste-management technologies, techniques and practices that harm the climate**, which the Basel Convention has failed to consider effectively to date, and in particular the full range of thermal treatment of plastic wastes.
- Ensure the new instrument **retains the prerogative to break new ground on plastic waste management and waste trade policy** given its focus on plastics and potential for significant advances in environmental protection compared to the Basel Convention that deals with all hazardous or other wastes.
- **Pay special attention to waste streams not covered or inadequately covered by the Basel Convention**, including their transboundary trade, including multimaterial plastic packaging, refuse-derived fuel, and PVC.

(For more detail, see p.7-9).



A clear glossary will support negotiations and help reduce conflicting interpretations of negotiated text. In particular, plastic should be defined as follows in order to fully address plastic pollution:

- Material consisting of **polymers or co-polymers to which additives or fillers may have been added**, including glass fiber or graphite (inclusive of composites)
- Polymers must be **solid** (excluding polymer gels) but **can be water-soluble** (e.g, PVA)
- Polymers can be:
 - **thermoplastics, thermosets**, as well as **elastomers**
 - **synthetic** (polymerized from bio-based, fossil-based, or inorganic monomers as in the case of silicone)
 - **semi-synthetic** (chemically-processed natural polymers that have been extruded into filaments e.g. viscose, lyocell, or film e.g. cellophane, or undergone other heavy chemical processing such as vulcanization e.g. rubber).

(For more detail, see p. 10-11).



Scientific research and data can help assess the **environmental impacts of different plastic waste-management technologies and processes**, and the **extent to which they displace virgin plastic production** to comply with the mandate in paragraph 3.b. Of UNEA resolution 5/14 to address “environmentally sound waste management, including through resource efficiency and circular economy approaches”. To date, studies show that:

- The **thermal treatment of plastic waste and so-called “chemical recycling” of plastics are toxic, carbon-intensive and materially inefficient**
- **Incinerator ash is a source of microplastics**
- Recycling has a valuable role to play in **delaying the final disposal of plastic waste but cannot prevent it**, and can have its own toxic impacts
- Recycling **cannot be assumed to displace virgin plastic production** - it can simply increase the total plastic feedstock supply.

(For more detail, see p.12-14).



To address the challenges that are specific to developing countries and countries in transition, the new global instrument must ensure that:

- Plastic waste management respects the principle of proximity and in particular that developed countries **manage their own plastic waste instead of dumping it on developing countries**
- **Waste-pickers are included in policy-making** on plastic waste and decisions on plastic waste-management facilities, and supported through a **just transition** process.

(For more detail, see p.13-14).



Regarding the **Stakeholders Forum**, given the short timeline for the considerable work ahead, GAIA recommends:

- a focus on stakeholders' direct incidence in negotiations during INCs
- thematic stakeholder webinars during the intersessional period rather than an in-person Forum that could divert energy and participation away from negotiations.

(For more detail, see p.14).

Organization of INCs

Time allocation decisions will shape the treaty. **Negotiation time should be allocated following the waste hierarchy, giving the priority to upstream controls on production** (including the sourcing of feedstocks for plastic production), **and uses** (including limiting applications such as for disposable products, and policy support for reuse), followed by design requirements, and waste-management (including waste-pickers' rights to recognition and just transition). Negotiations must address pollution issues, including plastic, toxic and climate pollution, as they occur at each of these stages (production, use, waste-management, legacy plastic pollution).

Waste-pickers, fenceline and frontline communities and Indigenous and Traditional communities must be able to participate effectively in negotiations if they choose to, and their inputs must be adequately reflected. The specific linkages between gender, plastics and the environment must also be recognized in the stakeholder engagement process (Lynn et al., 2017). This requires dedicated **financial and interpretation support** in all negotiation spaces (not limited to plenary) and beyond the UN languages, depending on the groups participating. Resources should be allocated for a **process to specifically engage Indigenous communities and waste-pickers**, and ensure that those communities are able to shape their engagement process. **Indigenous and Traditional knowledge systems, practices, science and innovations** must be taken into consideration in negotiations, and in the new instrument's scientific body, as appropriate and with the free prior and informed consent of concerned Indigenous and Traditional communities. Furthermore, a human rights approach within the treaty will help ensure that the rights of all affected communities and persons are respected.

The COVID-19 pandemic has also severely accentuated existing challenges to the effective and meaningful in person participation of Pacific island nations among other Small Island Developing States (SIDS) and created new challenges associated with virtual participation (SPREP, 2022). For those reasons, GAIA supports **SIDS representation in the INC bureaux**.

Instrument structure elements, key concepts, procedures, and mechanisms

Treaty design choices can foster government participation and compliance, and deter non-compliance, or conversely set a treaty up for failure (Tessnow-von Wysocki & Le Billon, 2019). To this end, GAIA recommends a structure for a global instrument on plastics that blends elements from existing treaty models, as others have done in the academic literature (Kirk, 2020).

A successful instrument on plastics requires a **robust and coherent structure** with common definitions and methodologies, robust and binding transparency, reporting and monitoring requirements. The Global Minimum Transparency Standard for hazardous chemicals provides a model in this regard (Health and Environment Justice Support et al., 2022). Deceptive accounting concepts such as plastic neutrality or plastic credits must be excluded to allow for clear and accurate accounting of plastics in our economies and environment (including in human bodies). The instrument's effectiveness will also largely depend on an enforcement mechanism.

UNEA resolution 5/14 mandates negotiations to set up an international instrument with the goal to "end plastic pollution". The instrument's structure, elements and targets must therefore be ambitious enough to support this goal. Significant controls on plastic production and use must therefore be considered.

Plastics, like ozone-depleting substances regulated under the Montreal Protocol, are synthetic substances, and therefore amenable to control at source. Furthermore, they are produced by only about 100 firms globally, which makes control even more feasible. Therefore, a **common, global production and use ban** such as provided by the Montreal Protocol, and that is not dependent on National Action Plans, can be considered (Kirk, 2020).

Bans can be implemented gradually through a cap-and-reduce approach, and with attention to industry and regional specificities. Caps on plastic production and use can be introduced at first, followed by phase-downs, with targets that are incrementally strengthened, towards complete bans. Regulation can be multifaceted, with emphasis on specific polymers, additives or uses at different times, in order to progress towards reduced plastic production and use overall.

Both the Montreal Protocol and Paris Agreement provide a phased adaptation process for different industries, which will be key for plastics since they are omnipresent in our global and local economies. For some sectors such as agriculture, plastic reduction may be slower but ultimately more successful by accompanying broader shifts such as increased urban farming (which would minimize transportation-related packaging) and agroecology (which would increase the use of cover crops instead of plastic mulching film). Longer compliance timelines for developing countries can be provided for (Kirk, 2020).

National Action Plans are valuable for their potential for flexibility for developing countries in particular, following the principle of common but differentiated responsibilities. However, they are more vulnerable to being undermined by petrochemical companies than a Montreal Protocol model where countries need to demonstrate that they have stopped using or producing certain plastics (Kirk, 2022). Moreover, having National Action Plans at the heart of regulation follows the model of the Paris Agreement that has an end-of-pipe approach to greenhouse gasses and fails to regulate the fossil fuels sector directly. It is therefore not a suitable model for a global instrument that would cover the lifecycle of plastics, and have a strong circular economy component, a concept that is entirely lacking from the Paris Agreement (Kirk, 2022).

Within an international instrument on plastics, National Action plans could be useful regarding waste management and in particular could be a **useful tool to establish local and national reuse infrastructure** as the most sustainable alternative to single-use plastic products from an overall environmental perspective.

In many countries, waste-pickers are the backbone of plastic waste collection, sorting and sale for recycling (Allen, 2021). At the same time, they are increasingly being barred from access to plastic waste through exclusion from Extended Producer Responsibility legislation, and through closure of landfills where they previously reclaimed recyclable plastics, which in many countries are being replaced by incinerators that also burn recyclable plastic waste, and generate significant toxic and climate emissions. For these reasons, the new international instrument should recognize and support waste-pickers, as well as establish measures for a **just transition for waste-pickers**, following the ILO's framework, including requirements to involve waste-pickers in the elaboration of legislation that affects their livelihoods, and guarantees for their fundamental rights. Such provisions could also be amplified through National Action Plans.

A **dedicated fund** can ensure fairness by giving developing countries the financial means to comply with treaty obligations. Action on legacy plastic pollution in the environment and associated toxic pollution can also be financed through a dedicated fund, with priority for environmental justice communities, particularly given the environmental persistence of plastics in the environment and associated toxic pollution (Kirk, 2020 and 2022). The fund could be resourced with contributions from the petrochemical industry, shifting the financial burden which is currently borne by local governments with no say on production and design decisions that shape the plastics economy and the cost of plastic waste management and pollution clean-up.

A subsidiary scientific body, free of conflicts of interest, that responds to queries and requests from the parties. This body should incorporate both western science as well as Indigenous and traditional knowledge practitioners. It could develop harmonized testing methodologies for plastics and associated toxics in human bodies, which are key to avoiding the circulation of toxics in the plastics economy and their concentration in recycled products.

Coordination with other international bodies

The **Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention)** is currently the main international agreement of relevance for plastics. Its scope for binding controls includes the trade of the following types of plastic waste, to address global environmental injustice arising from plastic waste dumping and the outsourcing of polluting waste-management operations required to process Global North plastic waste to Global South countries:

- all hazardous plastic wastes;
- most mixed, contaminated or halogenated plastic wastes plastic waste (that fall under listing Y48 on Annex II to the Convention);
- all electronic waste, which often has a significant plastic fraction.

The Basel Convention also identifies and classifies waste-management operations in its Annex IV, and establishes hazardous characteristics and constituents for wastes in its Annexes I and III, respectively. The Basel Convention also issues non-binding guidance on plastic waste management (including the draft updated guidelines on plastic waste currently under review). For these reasons, coordination between a new global instrument on plastics and the Basel Convention is particularly important. **Definitions of plastic waste and waste-management operations under a new global instrument must also be harmonized with definitions under the Basel Convention.**

At the same time, the Basel Convention lacks the power to address plastics across their lifecycle and take action on the root causes of global plastic pollution. For instance, banning plastic waste exports without reducing plastic production may trigger more dumping, landfilling, and burning, causing toxic pollution and exacerbating the climate crisis. Therefore, it will be particularly useful for the new global instrument on plastics to **focus on reducing plastic production and use and other upstream measures**, and such an emphasis will strengthen its complementarity with the Basel Convention. The plastic waste phase of the lifecycle, particularly the domestic management of plastic waste, remains within the scope of the new global instrument, but with more attention to coordination with the Basel Convention.

In addition, although the Basel Convention includes the concept of “environmentally-sound management” that aims to minimize harm to human health and the environment during the management of plastic wastes, it has so far failed to operationalize this concept effectively, and particularly in relation to the climate, despite the current global climate emergency. For this reason, a new global instrument on plastics should consider **excluding waste-management technologies, techniques and practices that harm the climate**, and in particular the full range of thermal treatment of plastic wastes, including incineration, co-incineration in cement kilns or other boilers, gasification and pyrolysis, as well as forms of solvolysis that require high energy inputs, and plastic-to-fuel processing.

Furthermore, the Basel Convention is not focused on plastics and covers all hazardous wastes and wastes requiring special consideration, and can only upgrade its coverage of plastic waste at a limited pace and in a piecemeal fashion. Therefore, it is important for the new global instrument to **retain the prerogative to break new ground on plastic waste management and waste trade policy** and take a comprehensive approach to plastic waste, particularly when such advancements improve protection of the environment and human health (for more detail see GAIA 2022). Subsequent harmonization with such advances within the Basel Convention would ensure coordination and non-duplication.

In particular, the Basel Convention currently fails to clearly and effectively control several types of plastic wastes and waste streams with significant plastic fractions, even when they rigorously would fall under the Basel Convention plastic amendments, because it has failed to address a number of overlapping entries on the Basel Convention Annex IX. Therefore, a new global instrument on plastic waste may wish to **pay special attention to waste streams not covered or inadequately covered by the Basel Convention**, including their transboundary trade.

These include plastic components and fractions in following materials, products, and their wastes:

- Motor vehicles
 - B1250: *Waste end-of-life motor vehicles, containing neither liquids nor other hazardous components*
- Multimaterial packaging
 - B3026: *The following waste from the pre-treatment of composite packaging for liquids, not containing Annex I materials in concentrations sufficient to exhibit Annex III characteristics:*
 - Non-separable plastic fraction
 - Non-separable plastic-aluminium fraction
- Paper wastes
 - B3020: *Paper, paperboard and paper product wastes*
 - Paper waste shipments have been shown to include up to 30% contamination with Y48 mixed plastic wastes (Petrlik et al. 2019).
- Rubber and rubber-rich products including tires
 - B3040: *Rubber wastes* and B3080: *Waste parings and scraps of rubber*
 - Most rubber streams today are synthetic or majority-synthetic.
 - B3140: *Waste pneumatic tyres, excluding those destined for Annex IVA operations [final disposal operations]*
 - Tyres are made from a mix of chemically-modified natural polymers, synthetic polymers, plastic textiles, and other materials.
- Textiles:

- Plastics make up 69% of all materials used in textiles (Changing Markets Foundation, 2022).
- The Basel Convention does not control those wastes and lists them on Annex IX entries B3030: *Textile wastes* and B3035: *Waste textile floor coverings, carpets*.
- Refuse-derived fuel (RDF):
 - Plastic wastes are a key component of dried and compacted wastes destined for incineration as a fuel, and marketed under a plethora of labels including “Refuse-Derived Fuel”, “Process Engineered Fuel”, “Solid Recovered Fuel”, “Tire-Derived Fuel”. Crucially, these materials are wastes, even though they are often traded as products in order to evade environmental controls that apply to waste trade (Bremmer 2022). The Basel Convention has no explicit entry covering RDF, although it is covered under listings Y46 *Waste collected from households* or Y48.
- Polyvinyl chloride (PVC) plastic:
 - Although PVC wastes rigorously fit the Basel Convention definition for hazardous wastes (PVC is an organohalogen, a hazardous constituent, which emits dioxins and furans when mismanaged, a hazardous characteristic), Parties have failed to explicitly list PVC wastes as hazardous. It now falls under listing Y48 for wastes requiring special consideration, and does not fall under the scope of the Basel Ban.

Glossary of terms

The glossary of terms may in many instances touch on key definitions that will be negotiated and significantly shape the treaty’s scope. A clear glossary will support negotiations and help reduce conflicting interpretations of negotiated text.

Additives must be defined to include both intentional additives as well as non-intentional additive substances (NIAS)(see HEAL, 2021), and include processing aids given their impacts in the production phase, even when their levels in finished products may be very low (see Blanc, 2018 on the health impacts of carbon disulphide in the rubber and viscose production process).

Just transition is a framework of interventions to secure the rights and livelihoods of workers and involve them in policymaking that affects them, in a context of economic shift away from industries and production modes that harm the environment. The ILO has provided guidelines in this regard (ILO, 2015).

Lifecycle encompasses raw material acquisition, production, use, recycling, other recovery, and final disposal (see Eunomia, 2020).

Plastic is material consisting of a solid polymer or co-polymer to which additives or fillers, including glass fiber or graphite, may have been added. Polymers can be thermoplastics, thermosets, as well as elastomers. They can be synthetic (polymerized from bio-based, fossil-based, or inorganic monomers as in the case of silicone), or semi-synthetic (chemically-processed natural polymers that have been extruded into filaments e.g. viscose, lyocell, or film e.g. cellophane, or undergone other heavy chemical processing such as vulcanization e.g. rubber)(see Hartmann et al., 2019). Water-soluble polymers such as polyvinyl alcohol (PVA) should also be regulated as plastics given their use in detergent encapsulation has been shown to lead to microplastic pollution due to incomplete dissolution (Rolsky et al. 2021).

The following table, adapted from Hartmann et al., 2019 is particularly useful, noting that GAIA departs from the Hartmann et al., 2019 proposal which also includes an insolubility criterion, whereas GAIA proposes to cover soluble polymers in order to address PVA microplastic pollution established by Rolsky et al. 2021.

Criterion	Recommendation	Examples
I: Chemical composition		
Ia: Polymers	All synthetic polymers:	
✓ Include	<ul style="list-style-type: none"> ▪ Thermoplastics ▪ Thermosets ▪ Elastomers ▪ Inorganic/hybrid 	All commodity plastics Polyurethanes, melamine Synthetic rubber Silicone
✓ Include	Heavily modified natural polymers (semi-synthetic)	Vulcanized natural rubber, regenerated cellulose
× Exclude	Slightly modified natural polymers	Dyed natural fibers
Ib: Additives		
✓ Include	All polymers included in Ia disregarding their additive content	Plasticized PVC with >50 % additives
Ic: Copolymers		
✓ Include	All copolymers	ABS, EVA, SBR
Id: Composites		
✓ Include	All composites containing synthetic polymer as essential ingredient	Reinforced polyester and epoxy
✓ Include	All surface coatings containing polymers as essential ingredient	Paints containing polyester, PUR, alkyd, acrylic, epoxy resin
✓ Include	Tire wear (and road) particles	-
? Open question	Is it necessary to define a minimum polymer content?	
II: Solid state		
✓ Include	All polymers with a T_m or $T_g > 20$ °C	See examples in Ia
× Exclude	Polymer gels	PVA, PEG
? Open question	Should wax-like polymers ($T_g < 20$ °C) be included?	

Plastic products are inclusive of plastic packaging.

Plastic recycling involves the reprocessing of plastic waste into products, materials or substances used in the economy, though not necessarily for the original purpose. Plastic recycling excludes processes that recovery energy or generate fuel.

Plastic waste should be defined consistently with the Basel Convention definition of waste, namely, plastic destined for any operation listed in Annex IV.B. to the Convention. The term “scrap” should be avoided in the text of the instrument as it is often more an industry term than a regulatory term, and sometimes obfuscates the waste status of plastic materials.

Plastic pollution is not limited to the unintended or unlawful presence of plastic in the environment, but also includes toxic pollution from plastics.

Post-consumer plastic waste must clearly exclude all plastic waste that does not come from consumers, and clearly exclude agricultural waste from the agricultural sector, otherwise deceptive claims on post-consumer recycled content arise (see The Last Beach Cleanup, 2022 regarding the current lawsuit against distributors of plastic bags with deceptive post-consumer recycled content claims in California).

Reusable products or packaging are products or packaging designed to be used several times for the same purpose. They are not products or packaging designed to be discarded after a single use, but that consumers may attempt to reuse several times. Reusable packaging owned by businesses requires adequate logistics to support return and reuse, supported by incentive systems such as deposits (see Schneider & Copello, 2022).

Single-use products are products routinely discarded after a single use.

Waste pickers are workers in informal or cooperative settings who collect, sort and sell household, commercial or industrial waste materials.

Definitions of *pyrolysis, gasification, solvolysis, incineration, incineration with energy recovery, thermal treatment* should align with the Basel Convention including future amendments to Annex 4.

Science on plastic waste-management technologies

UNEA resolution 5/14 paragraph 3.b. mandated the new instrument to address “environmentally sound waste management, including through resource efficiency and circular economy approaches”. Therefore, the instrument must only support waste-management technologies that minimize harm to human health and the environment, are resource-efficient and support the circular economy, and **exclude technologies that harm the environment, human health, and waste resources**.

Existing but unsuccessful thermal (pyrolysis, gasification) and solvent-based recovery processes for plastics have been marketed as novel **“chemical recycling” or “advanced recycling”**, when in fact their energy requirements are colossal, and they do not tolerate mixed or contaminated inputs, making them unfit for post-consumer plastic waste, and significant emitters of hazardous waste, or at best, dirty fuel (Rollinson et al., 2020). Any assessment of those technologies under the new instrument must coordinate with and avoid duplication of current work on the draft updated plastic guidelines under the Basel Convention. However, the global instrument can address the Basel Convention’s gaps in addressing climate impacts from plastic waste management by **excluding waste-management technologies that harm the climate and waste materials**, and in particular the full range of thermal treatment of plastic wastes, including incineration, co-incineration in cement kilns or other boilers, gasification and pyrolysis, as well as forms of solvolysis that require high energy inputs, and plastic-to-fuel processing, including the thermal treatment of plastic waste to power hydrogen production.

The **incineration** of plastic waste also contributes to microplastic pollution. Critical new research has consistently found microplastics in incinerator ash (Yang et al., 2021; Shen et al., 2021; Pienkoß et al., 2022), due to the incomplete combustion of plastic waste in municipal waste incinerators. This translates into a high risk of microplastic pollution from incinerator smokestack emissions, as well as ashfills and hazardous waste landfills where incinerator ash is disposed of, and of course other applications of incinerator ash such as road construction materials.

The mechanical recycling of plastic waste has **far lower toxic and climate-adverse impacts than incineration, pyrolysis, and so-called “chemical recycling”**. It conserves materials, but only partially: contamination, polymer degradation and process inefficiencies lead to significant **material losses with each cycle** of plastic recycling (Zink et al., 2019). In addition, plastic **recycling can circulate and concentrate**

toxics (Brosché et al., 2021), while operations involve toxic wastewater and other emissions, and are often delocalized to developing countries and countries in transition (GAIA, 2019).

Recycling can sometimes displace virgin plastic production, in which case it also avoids environmental impacts associated with such production. However, **recycling cannot be assumed to automatically displace virgin production one to one**, although many Life Cycle Analyses (LCAs) erroneously make this assumption. The extent to which it does depends on many factors including the accumulation of contaminants including toxics, and local market dynamics (Geyer, 2016, Zink et al. 2019).

Resource efficiency for a circular economy that limits harm to the environment and human health follows the waste hierarchy, prioritizing prevention and reuse. **The only way to prevent how much plastic waste is landfilled, incinerated or otherwise disposed of is to reduce how much plastic is produced - recycling only delays final disposal but does not prevent it** (Zink et al., 2019). Nevertheless, given adverse impacts associated with landfilling, incineration of plastic waste, even a modest impact in delaying final disposal is valuable.

Finally, the **circular economy is not wedded to specific materials, and plastics are no exception**. Therefore, it is important that the new instrument not limit its waste-management focus to a “circular plastics economy” but instead considers the general circular economy in addressing plastic pollution, including the incidence of plastic on other material streams, for instance as contaminants in paper and metal recycling that generate toxic and climate pollutants during waste-management. Other materials in the circular economy also have a role as reusable alternatives to disposable plastic products. Attempting to tackle the plastic pollution crisis through a “circular economy of plastics” is as absurd as attempting to tackle the climate crisis through a “circular economy of fossil fuels”.

Priorities, needs, challenges and barriers in developing countries

A significant challenge is **developed countries’ offloading of their plastic waste, and toxic emissions associated with their management, in developing countries and countries in transition** deepening global environmental injustice. This pattern became more visible after 2018 when plastic waste exports from developed countries shifted from China to new destinations such as Indonesia, Malaysia, Vietnam, India, Turkey and Mexico (GAIA, 2019, EIA 2021). This global plastic waste trade, including illegal shipments, does not only inflict a disproportionate toxic burden on importing countries, but also undermines local efforts to manage domestic waste and build a zero waste economy - indeed, many importing countries struggle to to manage their own plastic waste (Vilella et al., 2021). Waste-pickers are also negatively impacted by foreign plastic waste flooding domestic markets and causing plastic waste prices to collapse.

This injustice stems from the chemistry of plastics and unsustainable production and consumption patterns, and not from technology - it therefore cannot be remedied by technology transfer. Rather, the new international instrument must implementing the **principle of proximity** that the Basel Convention has enshired but failed to operationalize and implement. Developed countries remain the top per-capita consumers of plastic and generators of plastic waste, and have the responsibility to curb their plastic production, use, and waste exports to developing countries and countries in transition.

Another challenge faced by developing countries and countries in transition is the **vulnerability of their waste-collection system, due to insufficient support for waste-pickers**. Waste-pickers are the top

providers of plastic waste collection and sorting services in most developing countries, yet they experience uniquely intersectional vulnerability. They are members of economically, socially or politically marginalized communities including working classes, religious or ethnic minorities, oppressed castes, indigenous groups, have disproportionate toxics and disease exposure from handling waste, and work outdoors, often in harsh weather conditions.

At the same time, they are increasingly being barred from access to plastic waste through exclusion from Extended Producer Responsibility legislation, and through closure of landfills where they previously reclaimed recyclable plastics, which in many countries are being replaced by incinerators that also burn recyclable plastic waste, and generate significant toxic and climate emissions. **Waste-picker inclusion in waste policy-making** and decisions is therefore a priority in developing countries, as well as the establishment of a **just transition** process to support them through changes triggered by a new global instrument.

Stakeholders Forum

Meaningful and effective participation for civil society groups including environmental non-profit organizations, waste-picker cooperatives, frontline communities and Indigenous and Traditional communities is direct incidence in the negotiations.

The global instrument process is on a rather short timeline, with considerable scope to cover for action along the lifecycle of plastics. To that effect, we advise against holding a Stakeholder Forum as it would risk diverting energy and participation away from negotiations. A suitable alternative could be a series of thematic webinars hosted by the UNEP Secretariat during the intersessional period.

Bibliography

Allen, C. (2021). [An Inclusive Recovery: The Social, Environmental, & Economic Benefits of Partnering with Informal Recyclers](#), Global Alliance for Incinerator Alternatives

Blanc, P.D. (2018). [Fake Silk: The Lethal History of Viscose Rayon](#), Yale University Press

Bremmer, J. (2022). [Australian Refuse-Derived Fuel: Fuel product or plastic waste export in disguise?](#), IPEN and National Toxics Network

Brosché, S., Strakova, J., Bell, L. and Karlsson, T. (2021) [Widespread chemical contamination of recycled plastic pellets globally](#). International Pollutants Elimination Network (IPEN)

GAIA (2022). [UNEA factsheet on the plastic treaty and plastic waste trade](#)

GAIA (2019). [Discarded: Communities on the frontlines of the global plastic crisis](#)

Changing Markets Foundation (2022). [Licence to Greenwash: How certification schemes and voluntary initiatives are fuelling fossil fashion](#)

Geyer, R., Kuczenski, B., Zink, T., & Henderson, A. (2016). Common Misconceptions About Recycling (SSRN Scholarly Paper No. 2857369). <https://doi.org/10.1111/jiec.12355>

EIA (2022a). [Initial Considerations for the Intergovernmental Negotiating Committee on the UNEA Resolution 5/14 to End Plastic Pollution: Towards a Legally Binding Global Instrument](#)

EIA (2021). [The Truth Behind Trash: The scale and impact of the international trade in plastic waste](#)

EIA, CIEL & GAIA (2020). [Convention on Plastic Pollution: Toward a new global agreement to address plastic pollution](#)

Eunomia (2020). [Plastics: Can Life Cycle Assessment Rise to the Challenge? How to critically assess LCA for policy making](#)

Hartmann, N. B., Hüffer, T., Thompson, R. C., Hassellöv, M., Verschoor, A., Daugaard, A. E., Rist, S., Karlsson, T., Brennholt, N., Cole, M., Herrling, M. P., Hess, M. C., Ivleva, N. P., Lusher, A. L., & Wagner, M. (2019). Are We Speaking the Same Language? Recommendations for a Definition and Categorization Framework for Plastic Debris. *Environmental Science & Technology*, 53(3), 1039–1047. <https://doi.org/10.1021/acs.est.8b05297>

HEAL (2021). [How chemicals in food contact materials can impact people's health](#)

Health and Environment Justice Support, SSNC & groundWork (2022). [White Paper for a Global Minimum Transparency Standard \(GMTS\) for hazardous chemicals in products](#)

ILO (2015). [Guidelines for a just transition towards environmentally sustainable economies and societies for all](#)

Kirk, E. A. (2020). The Montreal Protocol or the Paris Agreement as a Model for a Plastics Treaty? *American Journal of International Law*, 114, 212–216. <https://doi.org/10.1017/aju.2020.39>

Kirk, E. A. (2022). [Four reasons to be hopeful about the planned global plastics treaty](#). The Conversation.

Lynn, H., Rech, S. & Samwel-Mantingh, M. (2017). [Plastics, Gender and the Environment: Findings of a literature study on the lifecycle of plastics and its impacts on women and men, from production to litter](#)

Petrlík, J., Ismawati, Y., DiGangi, J., Arisandi, P., Bell, L. & Beeler, B. (2019). [Plastic waste flooding Indonesia leads to toxic chemical contamination of the food chain](#), Arnika, Nexus3 Foundation, IPEN and Ecoton

Pienkoß, F., Abis, M., Bruno, M., Grönholm, R., Hoppe, M., Kuchta, K., Fiore, S., & Simon, F-G. (2022). Heavy metal recovery from the fine fraction of solid waste incineration bottom ash by wet density separation, *Journal of Material Cycles and Waste Management*, 22, pp. 364–377. <https://doi.org/10.1007/s10163-021-01325-1>

Rollinson, A.N., & Oladejo, J. (2020). [Chemical Recycling: Status, Sustainability and Environmental Impacts](#), Global Alliance for Incinerator Alternatives

Rolsky, C. & Kelkar, V. (2021). Degradation of polyvinyl alcohol in US wastewater treatment plants and subsequent nationwide emission estimate, *Environmental Research and Public Health*, 18 (11), <https://doi.org/10.3390/ijerph18116027>

Schneider, H. & Copello, L. (2022). [Packaging Reuse vs. Packaging Prevention: Understanding which policy measures best apply](#), Deutsche Umwelthilfe and Zero Waste Europe

Shen, M., Hu, T., Huang, W., Song, B., Qin, M., Yi, H., Zeng., G., & Zhang, Y. (2021). Can incineration completely eliminate plastic wastes? An investigation of microplastics and heavy metals in the bottom ash and fly ash from an incineration plant, *Science of the Total Environment*, 779, 146528. <https://doi.org/10.1016/j.scitotenv.2021.146528>

SPREP (2022). [SPREP Written Statement for the Resumed Fifth Session of the United Nations Environment Assembly \(UNEA-5.2\) 28 February – 2 March 2022](#)

Tessnow-von Wysocki, I., & Le Billon, P. (2019). Plastics at sea: Treaty design for a global solution to marine plastic pollution. *Environmental Science & Policy*, 100, 94–104. <https://doi.org/10.1016/j.envsci.2019.06.005>

The Last Beach Cleanup (2022). [New Lawsuits Seek to End Sales of Plastic Shopping Bags in California](#)

Tian, Z., Zhao, H., Peter, K. T., Gonzalez, M., Wetzels, J., Wu, C., Hu, X., Prat, J., Mudrock, E., Hettinger, R., Cortina, A. E., Biswas, R. G., Kock, F. V. C., Soong, R., Jenne, A., Du, B., Hou, F., He, H., Lundeen, R., ... Kolodziej, E. P. (2021). A ubiquitous tire rubber-derived chemical induces acute mortality in coho salmon. *Science*, 371(6525), 185–189. <https://doi.org/10.1126/science.abd6951>

Vilella, M., Condamine, P., & Sangaralingam, M. (2021). [European waste trade impacts on Malaysia's zero waste future](#), Zero Waste Europe

Yang, Z., Fan, L., Zhang, H., Wang, W., Shao, L., Ye, J., & He, P. (2021). Is incineration the terminator of plastics and microplastics?, *Journal of Hazardous Materials*, 401, 123429. <https://doi.org/10.1016/j.jhazmat.2020.123429>

Zink, T., & Geyer, R. (2019). Material Recycling and the Myth of Landfill Diversion. *Journal of Industrial Ecology*, 23(3), 541–548. <https://doi.org/10.1111/jiec.12808>

GAIA is a global network of more than 800 grassroots groups, NGOs, and individuals. We envision a just, zero waste world built on respect for ecological limits and community rights, where people are free from the burden of toxic pollution, and resources are sustainably conserved, not burned or dumped. We work to catalyze a global shift towards environmental justice by strengthening grassroots social movements that advance solutions to waste and pollution.