

The fourth session of the Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution (the Plastics Treaty INC-4) established two ad hoc open-ended expert groups, one on finance and one on products and chemicals. Both Expert Group 1 and Expert Group 2 will meet three times virtually in advance of the in-person meeting scheduled to take place in Bangkok, Thailand, from 24 – 28 August 2024. A synthesis document will be prepared by the co-chairs in advance of the in-person meeting and [a questionnaire has been submitted to delegations from expert group 2 to be completed by 25 July 2024.](#)

Regrettably, the INC Secretariat has interpreted the decision of INC-4 that intersessional work “will be open to participation of all Members of the Committee” as excluding the participation of Observers. Also, the Secretariat is taking no responsibility for requiring declarations of interest from experts nominated by Member States or other invited experts, stating that they have no remit to take any steps to ensure against conflicts of interest.

IPEN urges Members to continue to advocate for openness in the INC process and to ensure fair and inclusive participation of stakeholders and rights holders in all aspects of the INC process, including expert work. All limitations to public participation should be well justified and interpreted strictly.

Below are IPEN’s views on the intersessional work under the two expert groups.

## EXPERT GROUP 1: FINANCE

The expert group on finance will be co-chaired by Ms. Kate Lynch of Australia and Mr. Oliver Boachie of Ghana and has the mandate to:

*“...develop an analysis of potential sources, and means that could be mobilized, for implementation of the objectives of the instrument, including options for the establishment of a financial mechanism, alignment of financial flows, and catalyzing finance, for the consideration by the Committee at its fifth session.”*

In analyzing **funding sources**, all sources, including levies on the production of plastic polymers, should be explored. Lessons can also be learned from other policy spaces, such as the Climate Change Convention.

Regarding the **options for the financial mechanism**, IPEN believes it is important to establish a dedicated “plastics multilateral fund” or funds through the new instrument, with Member States and other funding sources contributing funds for supporting the Treaty implementation. This would be similar to the Montreal Protocol Multilateral Fund, which is funded by assessed contributions from Parties.

Although pollution is recognized as a planetary crisis, there is no dedicated funding to implement the necessary control measures. The chemicals and waste management cluster is already severely underfunded, and despite a substantial Global Environment Facility (GEF) replenishment for the period 2022-2026, funding is insufficient to cover the implementation of existing multilateral environmental agreements (MEAs).

Crucially, many States highlight the often long and complex conditions of access to the GEF and the need for a mechanism that is more adapted to new types of funding. Also, less than 1% of GEF resources are allocated to non-state actors and civil society. The GEF has a project-based approach, while fighting plastic pollution will need a comprehensive, programme-based approach, as successfully demonstrated under the Multilateral Fund of the Montreal Protocol.

The creation of a multilateral fund with sufficient, predictable, accessible, and sustainable funding will be crucial to ensure adequate funding for the implementation of the Plastics Treaty. Enabling activities would require financial support, for example, for strengthening capacity and awareness raising. Addressing the impacts of toxic

chemicals in plastics incurs enormous healthcare and environmental costs. Funding the necessary measures to control plastic pollution would be offset by the savings derived from decreased health and environmental costs.

The establishment of a stand-alone fund must ensure the following:

- A North/South balance in its governance;
- The need for accountability from beneficiaries on how the money is spent (commitment to levels of ambition to be achieved); and
- The eligibility of relevant Civil Society Actors to receive funding and their participation in the governance of the fund.
- An agreement between Member States on the overall budget to devote to the fight against plastic pollution and on the trajectory of the financial efforts they are prepared to make in the long term.

Further, the Treaty should implement the polluter pays principle by ensuring that the fossil fuels, petrochemicals, and plastics industry bear the environmental and health costs of their activities. This should apply to legacy pollution, costs associated directly with the implementation of the instrument (e.g., institution-building costs), and to ongoing health and environmental costs from the damage associated with plastics. The draft Treaty includes an option to implement the polluter pays principle through a global plastic pollution fee to be paid by plastic polymer producers within its jurisdiction. The Treaty should ensure that the funds collected through such a fee are used to implement the Treaty.

Members of the INC should be wary of establishing and implementing extended producer responsibility (EPR) schemes as a form of implementation of the polluters pays principle, as such schemes can be burdensome to manage. Further, current EPR schemes have had very limited success in increasing collection and recycling rates, and only in very specific sectors. Further, existing EPR policies do not extend the producers' responsibilities beyond national borders, which will be crucial in the context of a Plastics Treaty.

Should the INC decide to move forward with developing global EPR systems, it is important that the INC consider the limitations of existing EPR schemes. IPEN supports focusing instead on ensuring that the Treaty sets stringent targets on reducing plastic production and eliminating toxic plastic chemicals, rather than mandating how those objectives should be achieved.

## EXPERT GROUP 2: PRODUCTS AND CHEMICALS

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The group on products and chemicals will be chaired by Mr. Axel Borchmann of Germany, Ms. Gwen Sisor of Palau, and Mr. Luay Almkhtar of Iraq and has the mandate to:

*“...identify and analyze criteria and non-criteria based approaches with regard to plastic products and chemicals of concern in plastic products, and product design focusing on recyclability and reusability of plastic products, considering their uses and applications, for the consideration by the Committee at its fifth session.”*

### APPROACHES WITH REGARD TO CHEMICALS OF CONCERN

Plastic chemicals include monomers, polymers, additives, and non-intentionally added substances. Most plastic chemicals are made from fossil fuels that are transformed into aromatics and olefins, which are then used to make the monomers, additives, and polymers that make up plastics. Thousands of plastic chemicals have been identified as hazardous (i.e., “chemicals of concern”) due to their harmful effects on human health or the environment. Of the over 16,000 chemicals (Wagner et al 2024) that are associated with plastics, fewer than 1% (128) (BRS 2023) are regulated in existing global MEAs throughout their full life cycles.

Protecting human health and the environment from toxic chemicals will require the inclusion of the following approaches:

- **GLOBAL AND LEGALLY BINDING RESTRICTIONS:** Plastics move across boundaries due to trade (of both substances, products, and wastes) and as litter, and they carry toxic chemicals globally. The toxic impacts of plastics cannot be prevented with only national control measures.

- **TRADE RESTRICTION FOR TOXIC PLASTICS:** Countries that do not restrict hazardous chemicals in their plastics, either because they are not parties to the Treaty or because they consider the use of a chemical necessary in their country, should not be allowed to trade those plastics as materials, products, or for disposal.
- **A HAZARD-BASED APPROACH:** A hazard-based approach begins with the presumption that toxic chemicals are too dangerous to be used safely. Under a hazard-based approach, the toxicity of a chemical is enough to warrant health-protective regulations to prevent health harm. In contrast, a risk-based approach is based on the outdated assumption that a “safe” level of exposure to toxic chemicals can be established. This assumption disregards endocrine-disrupting properties and other non-threshold toxic impacts. A risk-based approach should be avoided as it requires long, costly, and often assumptions-biased toxicity evaluations; exposure routes and levels; chemical leaching; and risk versus benefit analyses. Therefore, a hazard-based approach is the only feasible and most health-protective approach for addressing toxic chemicals in plastics.
- **REGULATION OF GROUPS OF CHEMICALS:** Scientific evidence shows that individual chemicals from related groups or families usually present similar hazards. Lessons from past experiences demonstrate the importance of developing controls for whole classes or related groups of chemicals, rather than allowing the industry to substitute a known hazardous chemical with others with the same properties that have been subject to fewer or no safety studies. Under the Stockholm Convention, several chemicals are already listed as groups, such as polychlorinated biphenyls, dioxins, furans, polychlorinated naphthalenes, short-chained chlorinated paraffins, and perfluorohexane sulfonic acid (PFHxS), its salts, and PFHxS-related compounds (UNEP and BRS 2023, BRS 2023).
- **UPDATING WITH CURRENT SCIENTIFIC KNOWLEDGE:** The INC should ensure that the Treaty is flexible for incorporating evolving scientific knowledge and needs. The Treaty should contain an Annex that lists chemicals, including monomers and polymers, to be controlled/regulated throughout their life cycles. The list should be based on criteria to determine which chemicals to eliminate and phase out. It should also include an initial list of chemicals and polymers of concern (see examples pages 4-5).
- **A “NO DATA, NO MARKET” APPROACH:** Only chemicals that have been tested for safety and have publicly available toxicity data should be allowed in plastics and traded between Parties and non-Parties.
- **A TRANSPARENCY AND TRACEABILITY APPROACH:** Information on all chemicals used in plastics production and as plastic ingredients should be publicly available and communicated throughout the supply chain, including to waste managers, recyclers, and consumers through globally standardized labelling and global databases. Transparency approaches allow for quick identification of hazardous chemicals and substitution with safer alternatives.
- **MONITORING AND REPORTING APPROACHES:** The types and quantities of chemicals used in the life cycle of plastics should be reported, and the results of emissions and release monitoring of chemicals used in the manufacturing plants should be reported and accessible to the public through Pollutant Releases and Transfer Registers (PRTR).

## POLYMERS ARE ALSO CHEMICALS

In discussing plastic chemicals, it is important to note that the monomers and polymers that make up the backbone of plastics are also chemicals. Monomers and polymers of concern should therefore also be addressed under the provision since some of them:

- are toxic (Groh et al 2023);
- can leach toxic monomers (e.g., styrene, (NIH 2024) a known carcinogen, can leach from polystyrene); and
- can lead to the formation of toxic byproducts at certain stages of their life cycles (e.g., when PVC is burned, dioxins are formed (Zhang et al 2015)).

Additionally, many plastic polymers are associated with other concerns beyond chemical toxicity, such as:

- Persistence - plastic polymers are often associated with a long persistence, which alone is a cause for concern (Cousins et al. 2019);
- Particle toxicity - where the particles can cause inflammation, oxidative stress, or blockages in the body (Prata et al. 2020). Plastic particles found in blocked arteries have, for example, been linked to an increased risk of cardiac arrest (Marfella et al 2024); and
- Formation of greenhouse gases throughout their life cycles and, for some polymers, of very persistent greenhouse gases at certain stages of their life cycles (e.g., during the burning of fluoropolymers (Huber et al 2009)).

Lastly, we want to highlight that a lack of safety data on a chemical does not mean that the chemical can be considered safe. Today, no plastic chemicals can be classified as safe (Wagner et al 2024). A positive or permissible list of chemicals (i.e., a “white list” approach) would not provide a sufficient level of protection for several reasons (IPEN 2023), including that chemicals that have been identified as “low concern” in recent inventories are identified as such not because they are safe, but because there is little or no hazard data. In fact, for a majority (97%) of the chemicals identified as “low concern” in recent inventories, the level of research is not reported (BRS 2023), whereas for chemicals of high concern, all chemicals were reported as having “high levels” of toxicity data.

## CRITERIA AND NON-CRITERIA BASED APPROACHES

The term “non-criteria-based approaches” is not commonly used and, therefore, may be open to interpretation. The term “non-criteria approaches” might be interpreted as guidelines or responsibilities that do not mandate specific limits or standards but rather general actions. A distinction between different approaches may be made as follows:

**Quantitative criteria** are specific, measurable numeric limits, e.g., “DEHP concentration must not exceed 0.1% by weight in any plastic products.”

**Qualitative criteria** are descriptive standards focusing on characteristics or properties, e.g., “Plastics used for food packaging should be safe for use with food.”

An interpretation of **non-criteria approaches** would then be that this approach would not set numeric limits or qualitative descriptions. Therefore, we do not support adopting a non-criteria approach as the primary strategy in a global Treaty for plastics and chemicals. Non-criteria approaches:

- Are uncertain and inconsistent, which can lead to uneven enforcement; and
- Rely heavily on regulatory discretion, which can challenge accountability, transparency, and the objective to create a level playing field for all economic actors.

Therefore, it is recommended that the expert group focus primarily on developing criteria-based approaches for global and legally binding restrictions. Non-criteria-based approaches are not likely to be suitable as stand-alone measures, but the group might consider when it would be suitable to combine criteria-based approaches with non-criteria-based elements to enhance the protection of human health and the environment.

## POTENTIAL CRITERIA FOR CHEMICALS OF CONCERN

Criteria for regulating plastic chemicals may include that they are first evaluated to see if they are 1) plastics chemicals, 2) have available hazard data, and 3) increase barriers to circularity or have known or potential adverse effects on human health or the environment. Point three may then be evaluated against specific sub-criteria to identify the chemical hazards. Criteria may be evaluated quantitatively (i.e., against specific numbers), qualitatively (i.e., weighing different aspects), or a combination thereof.

The discussion during INC-4 included a few Member submissions specifically on the criteria for chemicals of concern, namely:

- [EU submission](#) with a proposal for non-exhaustive content of annexes A and B, including criteria and list of chemicals of concern;

- [Norway's submission](#), on behalf of Norway, Cook Islands and Rwanda, with an approach for criteria and lists of chemicals of concern; and
- [Norway's submission](#), on behalf of Norway, Cook Islands and Rwanda, with an Annex on criteria and lists of chemicals of concern.

Previous work on the topic was also performed between INC-3 and INC-4, under an [informal technical dialogue](#) led by the UK and Brazil.

There was strong agreement among the submissions and in the earlier informal technical dialogue on several of the criteria. Criteria that have been highlighted in several submissions and/or the informal technical dialogue as suitable for regulating chemicals under the Plastics Treaty include:

- Carcinogenic, Mutagenic, or toxic for Reproduction (CMR)
- Persistent, Bioaccumulative and Toxic (PBT)
- Very persistent and very accumulative (vPvB)
- Endocrine-disrupting chemicals
- Persistent mobile and toxic (PMT)
- Very persistent and very mobile (vPvM)
- Specific organ toxicity (STOT)

These criteria could, therefore, serve as a good starting point for the discussions. The submissions also mentioned several other relevant criteria that would be suitable to include in the discussion, such as neurotoxicants and immunotoxicants.

## INITIAL LISTS OF CHEMICAL GROUPS

Regarding which chemicals that may be suitable to evaluate for an initial list, we note that two groups of countries, EU and Norway, and Cook Islands and Rwanda, also made submissions on groups of chemicals to consider for an initial list. Submissions from Norway, the Cook Islands, Rwanda, and the EU have also highlighted groups of chemicals that may be suitable for an initial list. The groups include:

- Phthalates
- Bisphenols
- Alkylphenols
- Flame retardants
- Metals and Metal compounds
- UV stabilizers
- PFAS

IPEN has a 25-year track record of contributing to the development of global treaties to protect public health and the environment. Our members across more than 125 countries are uniquely positioned to effectively leverage our experience, technical expertise, and scientific integrity to push for a meaningful treaty to end the health threats posed by toxic plastics.

IPEN supports these groups as a good starting point for discussion around initial lists. For further information on groups that would be suitable, see IPEN's brief [Troubling Toxics – Eliminating Harmful Plastic Chemicals Through the Plastics Treaty](#).

## RECYCLABILITY AND REUSABILITY OF PLASTIC PRODUCTS

The mandate includes recyclability and reusability of products. To increase circularity, including through recyclability and reusability, it is necessary that:

- Only plastics that are free of toxic chemicals should be considered for reuse, refilling, repurposing, and recycling. Delegates should include under this control measure a prohibition on all forms of recycling plastics containing hazardous chemicals, similar to the Stockholm Convention's prohibition on the recycling of waste containing Persistent Organic Pollutants. (Article 6(d)(iii))
- Alternative plastics, including bioplastics, should have the same safety standards as conventional plastics.

- Transparency and traceability requirements such as labels, reporting, and product passports should be included to ensure that the plastic industry is accountable for complying with these provisions and to assess the reliability of their claims about their products (e.g., recycled content, circularity, etc.). Such requirements are also crucial for informed decision-making by all stakeholders, including consumers and recyclers.

Recycling of plastics has failed for decades. Mandating higher levels of recycled content in plastics would result in increased exposure to and emissions of toxic chemicals from plastics, as numerous studies have shown that recycled plastics contain and release hazardous chemicals. In fact, many toxic chemicals, including already globally banned ones, are present in recycled plastics (Brosché et al 2021). “Safe and environmentally sound recycled plastics” should be defined by the absence of hazardous chemicals and the ability to track the chemical content of the plastics used to produce them.

## MORE INFORMATION

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[Troubling Toxics – Eliminating Harmful Plastic Chemicals Through the Plastics Treaty](#)

[Frequently Asked Questions on Plastics and Chemicals](#)

[Enhancing Controls to Protect Human Health from Plastic](#)

[Transparency and traceability systems for plastics. Design and practicability considerations](#)

[Compilation of draft text of the international legally binding instrument on plastic pollution, including in the marine environment \(UNEP/PP/INC.5/4 ADVANCE\)](#)

[BRS \(2023\). Global governance of plastics and associated chemicals.](#) Secretariat of the Basel, Rotterdam and Stockholm Conventions, United Nations Environment Programme, Geneva. Karen Raubenheimer, Niko Urho.

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