Science-based priorities for negotiators at INC-5.2

To achieve an effective plastics treaty, the independent science shows that it will need to:

1. **Create a legally binding treaty with the scope to cover the full life cycle of plastics.**
   Plastics release chemicals and particles of all sizes (including micro- and nanoplastics) from extraction of feedstocks through to disposal. Focusing only on waste controls misses major pollution pathways. Obligations therefore need to address upstream production as well as mid- and downstream management to be effective and equitable. Find more details and scientific evidence in our **fact sheet** on plastic pollution across the life cycle.

2. **Set mandatory obligations to prevent plastic pollution at source.**
   National plans that implement obligatory production limits are still necessary to end plastic pollution, and minimize pressure on the **Triple Planetary Crisis.** Scaling up recycling alone cannot offset the increasing levels of global plastic production. Find more details and scientific evidence in our **policy brief** on Article 6.

3. **Ensure adequate and accessible financial, technical, and capacity support to enable all countries to meet their treaty obligations.**
   Redirecting harmful subsidies, levying upstream fees and balancing funds across prevention, redesign and remediation can mobilise the resources required. Targeted support and capacity-building enables a just transition for low-income countries and affected communities. Find more details and scientific evidence in our **letter to the editor** of Cambridge Prisms Plastics.

4. **Promote safe and sustainable production and consumption including phasing out groups of plastic chemicals and products of concern.**
   A hazard- and group-based approach (e.g., all bisphenols) prevents regrettable substitutions and maximises health benefits. Mandatory chemical passports give regulators and businesses the data needed to trace, recall and redesign unsafe and unsustainable plastics without compromising legitimate confidentiality. Find more details and scientific evidence in our **policy brief** on Article 3.

5. **Develop globally harmonised criteria for essential use, safety, sustainability, and transparency.**
   Setting globally harmonized criteria creates a level playing field, unlocks innovation, and supports trusted, safer and more sustainable materials, products, and markets (including for plastic alternatives and substitutes). Find more details and scientific evidence in our **policy brief** on Article 5.

6. **Build a legitimate and just treaty.**
   To ensure its legitimacy, implementation of the Treaty will be dependent on contributions from expert groups with broad expertise and policies to ensure transparency, representation, and mitigate conflicts of interest. This will also enable a just transition. Find more details and scientific evidence in our **policy brief** on a just transition.

7. **Establish a science-policy interface and harmonised global monitoring system.**
   A subsidiary science body with robust conflict-of-interest safeguards, backed by globally harmonized criteria, transparent reporting, and publicly accessible data, would enable evidence-based implementation, ensuring the treaty responds to evolving knowledge. Find more details and scientific evidence in our **policy brief** on an effective science-policy interface.

Specific science-based priorities for individual articles in the Chair's draft text

Article 2: Definitions

1. Clear definitions are an essential element of Multilateral Environmental Agreements (MEAs) to ensure common understanding.
2. Our **policy brief** makes recommendations for definitions currently in the Chair's Text and additional definitions of relevance to negotiations.

ℹ️ Find more details and rationale in our **policy brief** on Article 2.

Article 3: Plastic Products

1. Regulating hazardous chemicals globally and in all plastics (not just in specific products) maximizes health and cost benefits.
2. The treaty needs to adopt clear, evidence-based criteria to define chemicals of concern and to enable the inclusion of additional chemicals in the future.
3. Binding obligations to disclose and trace chemicals in plastics are essential for safety, circularity, and accountability.
4. Regulating entire groups of chemicals of concern, with a focus on hazards, is most efficient and avoids regrettable substitutions.

ℹ️ Find more details and scientific evidence in our **policy brief** on Article 3.

Article 5: Plastic Product Design

1. Globally binding design provisions will boost a transition to a safer and more sustainable non-toxic circular economy.
2. Product design criteria are key to enable a safer and more sustainable circular economy and mitigate future plastic pollution.
3. Evidence-based criteria for essential use, transparency, and the increased safety and sustainability of plastic products (and any alternatives/substitutes) are key for achieving the objectives of the treaty.
4. Transparency of product composition (polymers and chemicals) and their movement through the supply chain, as well as reporting of re-designed and phased-out products will aid effective implementation.

ℹ️ Find more details and scientific evidence in our **policy brief** on Article 5.

Article 6: Supply / Sustainable Production

1. Current production and consumption are not sustainable and lead to global impacts on the environment, human health, and economies.
2. Reduction in the supply of primary plastic polymers will significantly change the dynamics of the plastics economy, with benefits for the environment, human health, human rights, and economies.
3. Guidelines for safer and more sustainable production and consumption should follow the principles of the waste hierarchy, focus on essential uses, and be informed by independent science.
4. Regulation can foster innovation, and a strong Article 6 can help industry innovate towards a safer, more circular, and more sustainable plastic economy.

ℹ️ Find more details and scientific evidence in our **policy brief** on Article 6.

Article 7: Releases and Leakages

1. Releases are intentional, while leakages are non intentional. Emissions (to air and water) are included in both releases and leakages.
2. Releases and leakages occur throughout the full life cycle of plastics: during resource extraction/production, plastic production, transport, use, waste management (including landfilling, recycling, and thermal treatment), and removal and remediation.
3. Releases and leakages occur into all environments: freshwater, marine ecosystems, cryosphere, biota, soil and the atmosphere.
4. All forms of plastic pollution (macro, micro, nano, chemicals) need to be considered because they are all harmful for the environment and human health.

ℹ️ Find more details and scientific evidence in our **policy brief** on Article 7.

Article 11: Financial [Resources and] Mechanism

1. The financial mechanism should balance financing across upstream, midstream and downstream measures.
2. Redirecting existing financial flows and subsidies towards safer and more sustainable responses that align with the “prevention” and “polluter pays” principles could mobilize substantial resources.
3. The financial mechanism should provide fair, timely, and accessible support for countries and communities to facilitate effective compliance with their treaty obligations.
4. The financial mechanism should avoid past misdesigns and false solutions evident in other MEA financial mechanisms (such as plastics credit systems, lack of access or inequitable access to funds). Financial tools like plastic credits may repeat the problems seen in previous ineffective offset models.

Article 19: Health

1. Scientific evidence shows plastic pollution presents human and environmental health hazards throughout the entire plastics life cycle. This includes from raw material extraction, plastics production, normal and intended use of plastics products, transportation, plastics reuse, recycling, waste management and mismanagement, and from unintentional releases and leakages of substances and materials across the life cycle.
2. There is consensus amongst global health experts and the World Health Organization that protecting human health is a priority for the treaty.
3. The protection of human health in the treaty can be achieved by combining a stand alone article (Art. 19) on health with comprehensive integration of human health throughout relevant provisions. This is especially relevant in the objective of the treaty and in the articles addressing supply/production, chemicals of concern, and harmonized essential use, safety, sustainability, and transparency criteria (Articles 1, 3, 5, and 6).

ℹ️ Find more details and scientific evidence in our **policy brief** on Article 19.

Article 20(bis): Subsidiary Bodies

1. A dedicated science-policy interface will be needed to effectively operationalise the treaty. This subsidiary body will require additional technical, economic, social, and scientific input inclusive of a wide range of relevant scientific/expert contributions including from multiple academic disciplines, Indigenous knowledge holders, waste workers, and frontline communities.
2. Independent experts groups can be strengthened by a robust conflict of interest mitigation policy and process capable of objectively reviewing and evaluating scientific information, and updating and amending annexes as scientific knowledge advances.
3. While other existing science-policy interfaces (SPI) may be complementary, none have the scope nor mandate to facilitate an efficient Member State decision-making process under the COP of the future global plastics treaty.
4. Scientific and expert contributions will be needed in the interim period between the Diplomatic Conference and first Conference of the Parties (COP-1) (e.g. to inform the establishment of definitions, criteria, and initial annex lists).

ℹ️ Find more details and scientific evidence in our **policy brief** on an effective science-policy interface.

About the Scientists' Coalition

The **Scientists' Coalition for an Effective Plastics Treaty** supports Member States by volunteering their time and expertise to synthesize, summarize, and present relevant science free of conflicts of interest. 60 of our independent scientists are in Geneva, Switzerland from August 5-14, 2025 for the **resumed fifth session** of the Intergovernmental Negotiating Committee to develop an international legally binding instrument to end plastic pollution (INC-5.2).

To assist negotiators during INC-5.2, the Scientists' Coalition have developed many resources including **six new policy briefs reflecting on specific articles** in the Chair's Text in English, French, and Spanish. INC delegates, observers, and the media can explore these and **subscribe to our free INC Science Update newsletter** that will be published regularly during the meeting.

Our scientists are available before, during, and after the INC session to answer questions and to share and discuss the scientific evidence. To arrange a confidential meeting under Chatham House rules, please speak with a member of our Coalition in Geneva or contact the Coalition's secretariat via email (**scientists.coalition@ikhapp.org**) or Signal/WhatsApp (+64 20 452 4556).