

Comments on Article 2: Definitions

Clear definitions are an essential element of Multilateral Environmental Agreements (MEAs), ensuring common understanding and reducing the potential for ambiguity and disagreement. The need for a glossary of terms to support the INC process was requested in 2022, and UNEA 5/14 used definitions adopted or endorsed by intergovernmental processes [1] as well as other glossaries [2–4]. Reference to terms and definitions were part of INC-3 deliberations in contact groups [5] and the zero-draft text tabled for INC-4 [6]. To facilitate negotiations at INC-5, the Chair released versions of the Treaty Text, referred to as non-papers (NP). Article 2 of the Chair's Text (NP5) lists six definitions, with options for adoption [in square brackets] [7]. The definitions suggested below are based on best scientific understanding of plastic pollution, existing glossaries and reviews [2–4, 8] and precedents from other MEAs.

To facilitate negotiations based on scientific evidence, we suggest the following:

1. For INC-5.2, Article 2 could include the key definitions needed to facilitate negotiations.
2. Prior to the conference of parties (COP), a more substantive list of definitions could be prepared by an expert group/subsidiary body, adopting agreed terms (e.g., from other MEAs), as appropriate.

For definitions currently in NP5 [7], we propose the wording below, and the addition of a definition for pollution (see supporting material for each definition).

Plastic(s): material(s) made wholly or partly of synthetic or semi-synthetic polymers (based on [7] for discussion and for alternative options see [9]).

Pollution: the introduction by humans, directly or indirectly of substances or energy into the environment which results or is likely to result in such deleterious effects as harm to living resources and other organisms, hazards to human health, hindrance to legitimate activities, impairment of environmental quality, and reduction of amenities [10].

Plastic pollution: the introduction by humans, directly or indirectly of plastic chemicals, materials, products, and waste intentionally or unintentionally released, emitted, or leaked throughout the life cycle of plastics which results or is likely to result in such

deleterious effects as harm to living resources and other organisms, hazards to human health, hindrance to legitimate activities, impairment of environmental quality, and reduction of amenities (based on [7] see [9]).

Plastic product: a product which contains any form of plastic or a separable component of a larger product which is partly or entirely made of plastic (based on [7], for discussion see [9]).

Plastic waste: plastics or plastic products which are abandoned, discarded, lost, disposed of, intended to be disposed of, or are required to be disposed of by the provisions of national law [11].

Proposals for other relevant definitions (see supporting material)

Just transition: ensuring that measures taken to end plastic pollution are fair, equitable, and inclusive for all rights-holders and stakeholders across the full plastics lifecycle by safeguarding local and national economies and communities impacted by plastic pollution [or] corresponding control measures [12].

Primary plastic: a plastic material made of polymers that are used for the first time to create plastic products in any form.

Pre-production pellets or nurdles: small (< 5 mm) pieces of plastic that are used as a raw material to make plastic products. They are microplastics by definition because they are less than 5 mm in size. [13].

Sustainable consumption and production: the use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the full life cycle of the service or product so as not to jeopardize the needs of future generations [14].

Extended Producer Responsibility (EPR): a policy approach that makes producers responsible for their products along the entire lifecycle [15].

Life cycle: the consecutive and interlinked stages of a product system, from raw material acquisition or generation from natural resources to final disposal or remediation [16, 17].

Full life cycle of plastics: the entire supply chain of plastic products, from feedstock extraction to end-of-use [18].

Circular economy: an economic model based *inter alia* on sharing, leasing, reuse, repair, refurbishment and recycling, in an (almost) closed loop, which aims to retain the highest utility and value of products, components and materials at all times [19].

Microplastics: plastic particles that are less than 5 mm in their largest dimension or plastic fibers that are longer than 5 mm but have a diameter of less than 5 mm, including nano-sized particles [13–20].

Nanoplastics: plastic particles that are less than 1 micrometer in their largest dimension [16].

Intentionally added microplastics and/or nanoplastics: micro- and nanoplastics that have been manufactured and added to products [20].

Recycling: any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material, but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations [21]. For **Recycled plastic** see the [supporting material](#).

Environmentally Sound Management (ESM): taking all practicable steps to ensure that plastic waste and waste associated with the full life cycle of plastics are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes [11]. For **Environment** see the [supporting material](#).

Environmentally Sound Technologies (ESTs): technologies that have the potential for significantly improved environmental performance relative to other technologies. ESTs protect the environment and are less polluting. ESTs can also be defined as total systems that include know-how, procedures, goods and services, and equipment, as well as organizational and managerial procedures for promoting environmental safety and sustainability [22].

Authors: Conrad Sparks, Richard Thompson, Annika Jahnke, Martin Wagner, Montserrat Filella, João Frias, Melissa Wang, Trisia Farrelly, Esther Kentin and Costas Velis.

Reviewers: Winnie Courtene-Jones, Sussane Brander, Noreen O'Meara, Bethanie Carney Almroth, Florin Constantin, Natalia Grilli, Susanne Brander and Justin Boucher.

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