

BACK TO BASICS

What happened to effectiveness evaluation and science-based assessment in the plastic treaty negotiations?

BACKGROUND

- **UNEA Resolution 5/14.** [Resolution 5/14](#) established the mandate for a legally binding instrument to end plastic pollution, grounded in a comprehensive approach based on the full lifecycle of plastic. It also explicitly called for periodic assessment of the “effectiveness of the instrument in achieving its objectives” as well as “scientific and socio-economic assessments related to plastic pollution.” This mandate set clear expectations that regular assessment would be an operational element, supported by science and socio-economic input, ensuring the instrument evolves over time.
- **Effectiveness evaluation.** Effectiveness evaluations are a core feature of multilateral environmental agreements (MEAs), containing a common set of features that work together, namely: (i) regular evaluation cycles, typically mandated in one article and then cross-referenced in others setting out the topics to be evaluated and their relevance to future policymaking; (ii) monitoring of the pollutant in the environment, measured against baselines and indicators; (iii) reporting of the measures taken by the Parties and statistical data on the pollutant, according to harmonised methodologies and formats to ensure comparability and comparison; and (iv) a science-policy interface providing policymakers with scientific and socio-economic input upon which to base decisions. The [Minamata Convention](#), [Montreal Protocol](#) and [Paris Agreement](#) each contain these common features, operationalised across their varying structures and articles in different ways and tailored to achieve their specific objectives.
- **Plastic pollution context.** Plastic pollution is a rapidly evolving global transboundary crisis, characterised by increasing production, multiple sectors and pathways and ever-growing evidence of impacts on ecosystems and human health. To evaluate the effectiveness in achieving the treaty’s objectives – some variation of “protecting the environment and human health from plastic pollution, including in the marine environment” – will require harmonised monitoring of plastic pollution in marine and other environments as well as reporting of both measures and statistical data to identify trends, emerging risks and systemic failures. Scientific and socio-economic assessments on plastic pollution, as the name implies, will arm policymakers with scientific and socio-economic input to inform policies and priorities. Such reviews should take place regularly and frequently enough to ensure effectiveness and responsiveness.

LOSING THE PLOT

- **Early recognition.** Throughout most of the negotiations, effectiveness evaluation was framed as a substantive and adaptive mechanism, closely linked to monitoring, reporting and science. Even up until INC-5.1, country submissions, including those from the [African Group](#) and the [EU](#) as well as several individual Parties, envisaged regular evaluation cycles supported by robust monitoring, reporting and science.
- **Dramatic weakening.** By the INC-5.2, in the [latest Chair’s Text \(Geneva\)](#), effectiveness evaluation in Article 15 was reduced to a largely procedural CoP-led initiative, with only suggestive language on substantive content. This raises several concerns. **First**, a review of the information upon which the evaluation in Article 15 (effectiveness evaluation) “may” rely, namely Articles 13 (national plans), 14 (reporting) and 12 (implementation and compliance), should be mandatory. Moreover, Parties should be required to report not only the measures taken but to assess their own effectiveness in implementing the measures – creating a virtuous circle as done in the Minamata Convention. **Second**, as no concrete legal obligations on monitoring of the environment and reporting of statistical data exist, the text simply contains meek references to Article 16 (information exchange) and “available statistical data on consumption and production” and “comparable environmental monitoring data.” Monitoring and reporting are essential elements of any effectiveness evaluation and it is hard to imagine how effectiveness will be measured – what evidentiary basis – and against what baselines and indicators. **Third**, there is no clear reference to a subsidiary body to undertake and provide any scientific and socio-economic assessment. Although Article 19 empowers the Conference of the Parties to establish subsidiary bodies, the effectiveness evaluation would benefit from a clear reference thereto. Taken together, the effectiveness evaluation is decoupled from the data required to assess environmental outcomes and risks, functioning as a retrospective review of implementation rather than a mechanism capable of driving corrective action.

OPPORTUNITIES FOR COURSE CORRECTION

- **Restore outcome-based evaluation.** Effectiveness evaluation should be clearly framed as a tool to assess real-world outcomes and inform future policies and priorities, not just to review implementation efforts. Evaluation should assess trends in plastic pollution, environmental and health impacts and whether adopted measures are sufficient to meet the objectives and, if not, what additional measures should be undertaken.
- **Anchor evaluation in science.** The instrument should explicitly recognise the role of scientific, environmental, technical and economic information in the evaluation of effectiveness. Appropriate panels of qualified experts, free from conflict of interest, should be invited to assess and report conclusions to the Parties and inform future action.
- **Linking reporting, monitoring and evaluation.** Effectiveness evaluation cannot function without comparable and reliable data. The instrument should establish a clear architecture linking reporting, monitoring and evaluation, with agreed indicators, baselines, methodologies and format to ensure comparability. Evaluation should be explicitly based on this data.
- **Set out regular evaluation cycles.** Drawing on best practice, the instrument should include regular evaluation cycles with pre-defined time periods to structure evaluation and policymaking. The Montreal Protocol sets out a period of [at least every four years](#), with the evaluations referred to as “quadrennial assessments.” The Paris Agreement sets out a period of [every five years](#), with the evaluations referred to as “global stocktakes.” In contrast, the Minamata Convention does not outline a time period for its evaluations, other than the first one which is to take place [within six years](#).