

Policy Brief

Input to the first session of the Plenary of the Intergovernmental Science-Policy Panel on Chemicals, Waste and Pollution (ISP-CWP) in Geneva, Switzerland on 2-6 February 2026

Exploring Outputs of the ISP-CWP

Following UNEP/EA.5/Res.8 the goal of the ISP-CWP is to “contribute further to the sound management of chemicals and waste and prevent pollution.” One of its chief proposed functions is “conducting assessments of current issues and identifying potential evidence-based options to address, where possible, those issues, in particular those relevant to developing countries”. The strength of the assessments lies in the ISP-CWP’s ability to develop “consensual knowledge” free from vested interests, that is policy-relevant, but not policy-prescriptive, in issues that involve uncertainty. Here we explore potential related outputs of the ISP-CWP.

How would the ISP-CWP’s assessments differ from those of related existing international instruments?

The ISP-CWP is uniquely positioned amongst other instruments such as the Basel, Rotterdam, Stockholm and Minamata Conventions and the Global Framework on Chemicals with its broad mandate, including providing policy-relevant assessments, and multiple functions that include horizon scanning. With this broad mandate, the ISP-CWP can conduct future-looking, prospective assessments in addition to assessments focusing on retroactive mitigation and/or remediation. The ISP-CWP can integrate issues that now sit astride existing instruments. Finally, the ISP-CWP can use an interdisciplinary approach and employ multiple “ways of knowing” including Indigenous and Traditional Knowledge.

How can issues be prioritized?

The breadth of issues that could be assessed across the diversity of chemicals and waste problems is enormous. Thus, deciding on which issue to prioritize will be of utmost importance. We suggest that the ISP-CWP should not conduct chemical-by-chemical assessments, which are done by regulatory authorities or regional bodies.

Prioritization should consider impacts on human health, loss of biodiversity, the ability of a stressor to impinge on societal stability and the degree of irreversibility.* However, these criteria need to be augmented by considering future hazards (harm) and not only risks (where there is the probability of harm) or impacts (harm is occurring).

* Fuller et al. 2025: <https://doi.org/10.1016/j.envsci.2025.103994>

Future-oriented assessments can avert significant harm with much greater effectiveness and efficiency than delaying until an issue has grown into a risk or impact.

What types of assessments?

The ISP-CWP should conduct both retrospective and prospective assessments that are integrative and comprehensive, holistically consider root causes, barriers and enabling elements, intended and unintended consequences, and that build on previous “lessons learned” to develop policy-relevant, solutions-oriented assessments. The assessments can integrate knowledge and experiences from other science-policy interfaces such as the IPCC and IPBES to broadly, but pragmatically explore issues and their solution-space. Finally, the ISP-CWP assessments should be flexible in scope and depth, ranging from specific issues contained within a specific geography to more expansive and encompassing assessments.

Examples

We offer two examples of the types of integrative solutions-oriented assessments.

- The first is retrospective, concerning pollution from pharmaceuticals that threatens biodiversity, ecosystem services and public health globally, especially in Low and Middle-Income Countries.
- The second is prospective, concerning potential releases of chemicals and waste from technological infrastructure (e.g., hospitals, transportation hubs) and landfills located in coastal zones threatened by climate-induced sea level rise and extreme weather.

In closing...

The ISP-CWP has the mandate to conduct assessments, synthesis reports, summaries for policy makers and horizon scans. These authoritative assessments should explore effective solutions to the challenges confronting us today and in the future, with the potential to reduce impacts to people and ecosystems, based on independent and robust methods.

This work was facilitated by IPCP
the International Panel on Chemical Pollution
www.ipcp.ch

For detailed background information, please refer to our publication: Diamond, Sigmund et al. 2024. Exploring Outputs of the Intergovernmental Science-Policy Panel on Chemicals, Waste and Pollution Prevention. ES&TL
<https://pubs.acs.org/doi/10.1021/acs.estlett.4c00294>



Full open access paper

CONTACT

Martin Scheringer, ETH Zürich
scheringer@usys.ethz.ch

Miriam Diamond, University of Toronto,
miriam.diamond@utoronto.ca

Gabriel Sigmund, Wageningen University
gabriel.sigmund@wur.nl

