

Toward an “IPCC for chemicals”



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More than 15 years ago, the idea of an “IPCC for chemicals” was already presented in GAIA.¹ Now, after a long “incubation period”, the idea is gaining new momentum, as shown by the call *We need a global science-policy body on chemicals and waste* published in *Science* in February². What factors have enabled this development? A first important process is SAICM, the *Strategic Approach to International Chemicals Management*. SAICM was established in 2006 as a voluntary international framework that is open to all stakeholders and covers all sectors of chemicals and waste.³ Over the many years of multi-stakeholder discussion under SAICM, it has become apparent that a stronger contribution by academic scientists is desirable (but a format for this has not yet been agreed upon under SAICM). A second milestone is the *Global Chemicals Outlook II* issued by UNEP in 2019⁴. This comprehensive impact analysis of chemical pollution shows that the goals of a sound management of chemicals and waste have not been reached in many parts of the world. Another driver is the evidence of the ongoing and massive decline in populations of amphibians, insects and birds in many parts of the world, and of a long-term decline in human sperm count. Impacts of chemicals are one of the causes of these trends. A last element that plays a significant role is the increasing awareness of a global “PFAS crisis”, that is, the recognition that poly- and perfluoroalkyl substances (PFAS) have massively contaminated groundwater reservoirs in many countries and that this contamination cannot be cleaned up because many PFAS are so extremely stable (persistent) in the environment that they will never be degraded⁵.

Against this backdrop, Wang and co-authors² acknowledge the important work of many science-policy interface (SPI) bodies in the area of chemicals and waste, but also point out four remaining gaps: 1. a lack of coverage because existing SPI bodies all have their specific (and limited) scope; 2. a lack of horizon scanning and early warning mechanisms; 3. a lack of bidirectional communication (not just science to policy, but also policy to science), and 4. insufficient involvement of the wider scientific community. Wang et al. opened up their call for an “IPCC for chemicals” for signature and have received over 1700 signatures, predominantly from scientists, from more than 80 countries⁶; the call will remain open for signature until September 2021. This is a strong sign of support from science, but what is still unclear is how much support the initiative will receive from the political side. The goal of this activity is to present the call for a global SPI body on chemicals along with all signatures to the United Nations Environment Assembly, UNEA5-2, in February 2022.

What may be expected from such a new body? Of course, it will not directly solve the many problems of chemical pollution globally. However, it can generate much more visibility, increase international knowledge and technology transfer and collaboration, and create a long-term commitment that is stronger than the current efforts going on within their respective “silos”.

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1 Scheringer, M. 2004. Von der Stockholm-Konvention zu einem International Panel on Chemical Pollution. *GAIA* 13/2: 81–82.

<https://doi.org/10.14512/gaia.13.2.1>

2 Wang, Z. et al. 2021. We need a global science-policy body on chemicals and waste. *Science* 371: 774–776.

<https://doi.org/10.1126/science.abe9090>

3 Backhaus, T., M. Scheringer, Z. Wang. 2018. Developing SAICM into a framework for the international governance of chemicals throughout their lifecycle: looking beyond 2020. *Integrated Environmental Assessment and Management* 14: 432–433.

<https://doi.org/10.1002/ieam.4052>

4 UNEP (United Nations Environment Programme). 2019. *Global Chemicals Outlook II*.

www.unep.org/resources/report/global-chemicals-outlook-ii-legacies-innovative-solutions

5 Cousins, I. T., C. A. Ng, Z. Wang, M. Scheringer. 2019. Why is high persistence alone a major cause of concern? *Environmental Science: Processes & Impacts* 21: 781–792.

<https://doi.org/10.1039/C8EM00515J>

6 www.ipcp.ch/activities/developing-a-global-science-policy-body-for-chemical-pollution