

Input to the OEWG 2.0 for the development of the Science-Policy Panel to contribute further to the sound management of chemicals and waste and to prevent pollution.

## Prerequisites for an Effective Science-Policy Panel

### The need to consider hazards, not risk or impact

Recently Fuller et al. have proposed that impact, rather than risk or hazard, guide the prioritization of environmental issues. Similarly, SETAC has proposed that a risk assessment process should guide the prioritization process. Both argue that impact (a measure of damage) or risk (probability of harm) should be used because these measures better reflect actual harm or damage. An alternative is to consider hazard, which is the inherent property of a substance to cause harm without demonstrating that sufficient exposure could cause harm (risk) or damage (impact).

These arguments in favor of impact or risk have significant shortcomings:

(1) Demonstrated inability to mitigate harm or damage in a timely fashion once identified in an impact or risk assessment.

Factors such as financial investment in industrial production and manufacturing processes, costs and technical feasibility of switching to a safer alternative, and on-going emissions from widespread and accumulated in-use and waste stocks pose strong impediments to reducing impact once a substance(s) has been used long enough to establish evidence of impact or an estimate of risk. The effect, known as “lock-in”, is difficult and costly to break, as is evident from the continued use of hazardous substances with well documented impacts. Alternatives assessment can offer a way to reduce risk and impact, but many examples illustrate “regrettable substitution” in which that one substance with demonstrated hazard, risk or impact is often replaced by an-

other for which hazard, risk and impact is to be discovered. Also, impacts or risks are too often alleviated in one region by shifting the burden to another region with less well-developed protections.

(2) Assumed ability to pre-empt or predict impact or risk before it happens.

Acting pre-emptively to avoid impact or risk relies on establishing the hazard of a substance and managing its production and use before it becomes locked-in. And acting pre-emptively is in-line with the SPP’s intent to incorporate the Precautionary Principle as stated in the Draft text for proposals to establish a science-policy panel. Acting in a precautionary way requires action based on knowledge of hazard, well before widespread exposure could result in risk and then impact.

**Action - We urge the SPP to adopt a hazard framework** in its prioritization process to be consistent with supporting the Precautionary Principle and to effectively and efficiently avoid risk and impact.

#### REFERENCES

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- Blumenthal J et al. 2022. Time to break the “lock-in” impediments to chemicals management. *Environ Sci Technol* 56(7): 3863-3870. <https://doi.org/10.1021/acs.est.1c06615>
- UNEP/SPP-CWP/OEWG.2/INF/10 Draft text for proposals to establish a science-policy panel. <https://wedocs.unep.org/bitstream/handle/20.500.11822/44166/Drafttextproposalsstoestablishsciencepolicypanel.pdf>

This work was facilitated by IPCP, the International Panel on Chemical Pollution, [www.ipcp.ch](http://www.ipcp.ch).

For detailed background information, please refer to our publication: Schäffer et al. 2023. Conflicts of Interest in the Assessment of Chemicals, Waste and Pollution. *Environmental Science & Technology*, <http://doi.org/10.1021/acs.est.3c04213>



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