

Inputs to the third session of the ad hoc open-ended working group to prepare proposals for a science-policy panel to contribute further to the sound management of chemicals and waste and to prevent pollution (OEWG-3)

In March 2022, the United Nations Environment Assembly (UNEA) decided that a Science-Policy Panel should be established to contribute further to the sound management of chemicals and waste and to prevent pollution. Through Resolution 5/8, UNEA recognized the importance of science-based assessments to inform decision-making, and the role of the sound management of chemicals and waste in protecting human health and the environment. The resolution also decided that the panel should have “procedures that seek to ensure that the work of the panel is transparent and impartial and that it can produce reports and assessments that are credible and scientifically robust.”¹

Robust independent science consistently shows that pollution and the unsound management of chemicals and waste negatively impact the environment, human health and wellbeing. This has profound implications for the effective enjoyment of human rights, including the right to a healthy environment, life, health, food, water, sanitation, a healthy work environment, development, housing, and non-discrimination, to which States and businesses have obligations to respect.

Efforts to address the far-reaching harms caused by chemicals, waste and pollution must be informed by robust independent science. However, corporate influence, attacks on scientific studies, campaigns against scientists, misleading literature, and exploitation of scientific illiteracy hinder progress.² Over the past decades, tobacco, pharmaceutical, petrochemical and agricultural businesses, and others, have worked to suppress research and analysis regarding their failure to respect the rights of others caused by their products and actions. Maximizing return on investment is often more important than the respect of human rights.

The right of everyone to enjoy the benefits of scientific progress and its applications (right to science) requires that policies be based on the best available, generally accepted scientific evidence, but there is often a large gap between scientific knowledge and regulatory responses. This gap can result from, *inter alia*, disinformation to manipulate public opinion, lack of participation of rights holders in the design of environmental policy, lack of political will, limits to public funding, and the undermining of the science-policy interface by conflicts of interest.

This right also requires decision makers to use the best science available to create, adopt, update, and change regulations aiming at advancing the realization of human rights for all people. As put forward by the Special Rapporteur on toxics and human rights, “failure to align government policies with the best available scientific evidence, are incompatible with the right to science. When the right to science is compromised, individuals and communities may be exposed to hazardous substances”.³

In order to fulfil its goals to promote the sound management of chemicals and waste and to prevent pollution, and align its mandate and work with legally binding human rights standards and obligations, a Science-Policy Panel on Chemicals, Waste and Pollution Prevention must include the following elements:

¹ UNEA, [“Science-Policy Panel to Contribute Further to the Sound Management of Chemicals and Waste and to Prevent Pollution” \(UNEP/SPP-CWP/OEWG.1\(I\)/INF/1\)](#).

² Volker Türk, [“Protect the ‘right to science’ for people and the planet”](#), Nature, 2 November 2023.

³ Marcos Orellana, [“Right to science in the context of toxic substances” \(A/HRC/48/61\)](#).

1. **A clear commitment to respect and protect human rights**
2. **A conflict of interest policy that protects the right of everyone to enjoy the benefits of scientific progress and its applications**
3. **Transparency and the right of access to information in environmental matters**
4. **The right to participation in environmental matters**
5. **Enabling a safe space for scientific enquiry**
6. **Strengthening international cooperation**

1. A clear commitment to respect and protect human rights

Pollution, including from the production and use of toxic chemicals and waste, is a direct consequence of operating unsustainable economies and pose a global threat to human rights, including the rights to a clean, healthy and sustainable environment, life, health, food, water and sanitation, development, housing and non-discrimination.

The right to a healthy environment ensures inclusive and informed decision-making aligned with scientific evidence and the needs of everyone, including people in vulnerable situations. It also requires international cooperation and equity in environmental action. It advances accountability, including extraterritorial jurisdiction over human rights harms caused by environmental degradation such as chemicals, waste and pollution. It also prioritizes actions to address the disproportionate risk and impact of chemical, waste and pollution on marginalized communities who bear the least responsibility but usually bare the most harm and have very limited resources.

- **The promotion, respect and protection of human rights should be recognized as a key operating principle of the Panel, alongside the principles of prevention, precaution, gender equality, non-discrimination and intergenerational equity.**

2. A conflict of interest policy that protects the right of everyone to enjoy the benefits of scientific progress and its applications

According to the Working Group on Business and Human Rights, conflict of interest can involve attempts by business entities to achieve policy change, often favourable to sponsoring companies' business models and detrimental to the health and well-being of individuals, groups and peoples, by influencing research and knowledge production.⁴ It may also include attempts by business actors to cast doubt on the validity of existing research that suggests links between certain industries' products and services, withhold information, and discredit independent science.⁵

The Special Rapporteur on toxics and human rights has described some well-known cases of conflicts of interest, including 1) how the asbestos industry has blocked national and international regulations through campaigns suggesting that asbestos is not toxic; 2) companies that produce highly hazardous pesticides have pressured or misled governments in order to avoid controls or bans; 3) companies that produce or market dangerous chemicals, such as endocrine disrupting chemicals and "forever chemicals" (per- and polyfluoroalkyl substances), have actively distorted facts or diverted attention to avoid or delay controls and protections; 4) the plastics industry has delayed controls, including by spreading disinformation on the false promises of recycling; and 5) the fossil fuel industry has spread

⁴ Working Group on the issue of human rights and transnational corporations and other business enterprises (Note by the Secretary General) "[Corporate influence in the political and regulatory sphere: Ensuring business practice in line with the Guiding Principles on Business and Human Rights](#)" (A/77/201).

⁵ A review of Conflict of Interest (COI) in scientific research related to regulation and litigation showed that companies (or others) can manipulate research through funding, research design, data falsification or fabrication, data analysis and interpretation and suppression of results. It also showed that COI damage the public trust in research. See David B. Resnik, "[Conflicts of Interest in Scientific Research Related to Regulation or Litigation](#)", J Philos Sci Law, 2023.

disinformation on climate change, the result of which has been delayed action on the part of governments in the face of a planetary climate emergency.⁶

The Committee on Economic, Social and Cultural Rights calls for industry and governments to make every effort possible to promote accurate scientific information.⁷ Conflicts of interest, however, undermine scientific freedom and States' duty to respect, protect and fulfil human rights. When regulatory agencies inadequately monitor, disclose or manage conflicts of interest, such conflicts can pervade the regulatory process and impair an enabling environment for science, with even more devastating consequences for human health, well-being and the planet.⁸

As a first step, safeguards must be established for the disclosure of these actual or perceived conflicts of interest. However, conflict of interest declarations alone are not enough. Experts or panel members must be appointed to act independently and not represent the member, organization or institution appointing them. Experts with a conflict of interest should not participate in the core work of science-policy interfaces. To prevent the risks associated with the existence of conflicts of interest, the new science-policy panel must include safeguards and mechanisms to implement policies that ensure an environment in which actual or perceived conflicts of interest (i.e. potential conflicts of interest resulting from previous engagements) are adequately disclosed and prevented. This should be applicable to all involved experts and partnerships engaged in the work of the panel.⁹ Information on (potential) conflicts of interest and the outcomes of their evaluations should be made public and be independently monitored to ensure transparency and secure public confidence in the work of the panel.

- **The credibility and effectiveness of a Science Policy Panel in promoting the sound management of chemicals and waste and preventing pollution will be compromised if there are any conflicts of interest, or even the perception of such conflicts, within the panel or its subsidiary bodies. Building from lessons learned from IPCC, IPBES, IRP, POPRC, and WHO FCTC,¹⁰ it is imperative that the new panel adopts and implements a comprehensive conflict of interest policy, which ensures the disclosure and evaluation of potential conflicts of interest, including those from past engagements, for all participants and partnerships. This information should be publicly available, and the process should ensure that experts with potential conflicts of interest cannot be associated with the work of the Panel.**

3. Transparency: protecting the right of access to information in environmental matters

⁶ In September 2021, the United Nations Human Rights Council discussed the report on “the right to science in the context of toxic substances,” presented by the United Nations Special Rapporteur on Toxics and Human Rights. The report clarified the duty of States to align their regulations on chemicals and wastes with the best available scientific evidence, and it recommended that States establish a global science-policy interface panel on the sound management of chemicals and wastes that is free of conflict of interest. See Marcos Orellana, [“Right to science in the context of toxic substances” \(A/HRC/48/61\)](https://www.unhcr.org/refugees/article/2021/09/16-right-to-science-in-the-context-of-toxic-substances.html).

⁷ CESCR, [“General comment No. 25 \(2020\) on science and economic, social and cultural rights” \(E/C.12/GC/25\)](https://www.unhcr.org/refugees/article/2021/09/16-right-to-science-in-the-context-of-toxic-substances.html).

⁸ Marcos Orellana, [“Right to science in the context of toxic substances” \(A/HRC/48/61\)](https://www.unhcr.org/refugees/article/2021/09/16-right-to-science-in-the-context-of-toxic-substances.html).

⁹ The SPP should follow the model of other COI policies, such as for POPRC, where experts are required to disclose both real, potential and apparent conflict of interest (SC-1/8).

¹⁰ See The Intergovernmental Panel on Climate Change (IPCC) conflict of interest policy (<https://www.ipcc.ch/site/assets/uploads/2018/09/ipcc-conflict-of-interest-2016.pdf>); the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) conflict of interest policy (<https://www.ipbes.net/document-library-catalogue/conflict-interest-policy-and-implementation-procedures>); the International Resource Panel (IRP) conflict of interest policy (<https://www.ipbes.net/document-library-catalogue/conflict-interest-policy-and-implementation-procedures>); the Persistent Organic Pollutants Review Committee (POPRC) under the Stockholm Convention (<https://www.informea.org/en/decision/conflicts-interest-0>); and the WHO Framework Convention on Tobacco Control (FCTC), which requires all Parties, when setting and implementing their public health policies with respect to tobacco control, to “... act to protect these policies from commercial and other vested interests of the tobacco industry in accordance with national law” (<https://fctc.who.int/who-fctc/governance/declaration-of-interest>).

Transparency is essential to guarantee objective and reliable science that is accessible and a consistent with human rights obligations and the advancement of human health and welfare. As put forward by the Special Rapporteur on toxics and human rights, “transparency and open access to scientific information enables science to evolve”, while “secrecy and collusion are in principle contrary to the integrity of science at the service of humanity”.¹¹

The Committee on Economic, Social and Cultural Rights recognizes that scientific knowledge and information, understood as a benefit of scientific progress, should be achieved “through the development and dissemination of the [scientific] knowledge itself”.¹² The Committee also identifies the duty of governments to remove any limitations on access to scientific information and to promote accurate scientific information, refrain from disinformation and adopt mechanisms to provide protection against the harmful consequences of false and misleading information.

Under the right of access to information, States have the duty to make available accurate information on the environmental and health impacts and causes of pollution. The new panel should ensure that information is readily available, in an accessible format and appropriate context, to all, in particular consumers, workers and other rights-holders with particular attention to the specific needs of those in vulnerable situations and people at risk.

A new science-policy panel needs to ensure that its work relies on research that is unbiased and conducted transparently, by making its scientific basis openly available. This includes ensuring transparency in the work and decision-making process of the panel and making the data and sources used to derive the outputs of a completed body of scientific research publicly accessible. This would ensure access to information, and allow for scrutiny of the outputs, which would increase trust in them, and help prevent conflicts of interest. When such data are accessible, they can be used to gain an understanding of the basis for policy decisions and the findings can be subjected to a process of scientific peer review. Any discrepancies can be scrutinized. On the other hand, without the ability to access the sources used, the outputs of the Panel may be perceived as less reliable and credible.

Commercially sensitive information: Information on the risks and harms caused by hazardous substances and waste should never be considered confidential

Confidentiality claims must be legitimate in accordance with international human rights standards.¹³ Under the principle of maximum disclosure, there is a presumption that all information held by public bodies should be subject to disclosure and subject to a narrow set of public-interest limitations.¹⁴

There is widespread recognition that health¹⁵ and safety information should not be confidential, and States have legally binding obligations in this respect.¹⁶ This is in line with the Stockholm Convention, article 9(5) and the Minamata Convention on Mercury, article 17, which stipulate that information on health and safety of humans and the environment shall not be regarded as confidential.

➤ **In the context of the SPP, transparency requires the disclosure of data and criteria used in assessments. The new Panel should not allow the withholding of information on the environmental and health impacts from disclosure under the pretence that it is confidential business information. Information on the risks and harms caused by hazardous substances and**

¹¹ Marcos Orellana, [“Right to science in the context of toxic substances” \(A/HRC/48/61\)](#).

¹² CESCR, [“General comment No. 25 \(2020\) on science and economic, social and cultural rights” \(E/C.12/GC/25\)](#).

¹³ See International Covenant on Civil and Political Rights, article 19 (3).

¹⁴ Başkut Tuncak, [“Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes” \(A/HRC/30/40\)](#).

¹⁵ This does not apply, for instance, to personal health information.

¹⁶ “The refusal to disclose information because it would adversely affect the value of intellectual property or the confidentiality of commercial businesses or industrial information is not legitimate if it may hamper public health or the overall public interest”. See Başkut Tuncak, [“Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes” \(A/HRC/30/40\)](#).

waste should never be considered confidential. States and businesses should be guided by the principle of full disclosure, allowing secrecy only when the necessity and legitimacy of confidentiality are proved. States must require that claims of confidentiality be justified and periodically substantiated. ¹⁷

4. The right to participation in environmental matters

Under international environmental law and human rights law,¹⁸ all people have the right to meaningful and informed participation, including in decision-making relevant to the environment. This also makes for more effective policies and provides safeguards against concentrations of wealth and power eroding rule of law and democratic governance. This right has also been included in Principle 10 of the 1992 Rio Declaration on Environment and Development, the 1998 Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention) and the 2018 Regional Agreement on Access to Information, Public Partnership and Justice in Environmental Matters in Latin America and the Caribbean (Escazú Agreement).

An effective science-policy interface mechanism must engage rights-holders, guaranteeing opportunities for their meaningful and informed participation. It should ensure gender, geographical, sectoral and disciplinary diversity of experts in the panel and include Indigenous Peoples' rights and knowledge systems, local knowledge and citizen science.

"Citizen science" projects create opportunities for participation in data collection, contributing to question formulation, identification of research focuses, data analysis and interpretation, and the dissemination of scientific information. The citizen science model of engagement, which ties scientific inquiry to the needs of communities, can contribute to the relevance and impact of scientific research, ensuring that the benefits of science reach people in vulnerable situations. Knowledge empowers communities to exercise agency on their own behalf.¹⁹ Citizen science will be critical for the "horizon scanning" function of the panel, as communities on the ground often see or find issues before they are widely documented.

Information concerning the risks and benefits of science, technology and innovation should be accessible without discrimination. The new science policy panel must put in place all necessary efforts to overcome persistent inequalities in scientific advancement both within and among countries, through culturally and gender-appropriate means of education and communication, with the aim of encouraging the widest participation in scientific progress of those populations that have traditionally been excluded from such progress.²⁰ This also requires that special attention should be paid to groups and peoples that have experienced systemic discrimination in the enjoyment of the right to participate in and to enjoy the benefits of scientific progress and its applications, such as women, children, youth, persons with disabilities, older persons, Indigenous Peoples, People of African Descent, frontline communities, and persons living in poverty.

- **The right to meaningful, active, safe and informed participation must be operationalized throughout the different modalities of work of the Panel, in particular for the people and groups most impacted by chemicals, waste and pollution. Therefore, the foundational documents of the new panel must also include provisions to ensure the full participation of rights holders in the Panel and its subsidiary bodies.**

¹⁷ Ibid.

¹⁸ The right to participate in public affairs, is codified in international law in article 21 of the Universal Declaration of Human Rights (UDHR), article 25 of the International Covenant on Civil and Political Rights (ICCPR), as well as in articles of other international treaties such as the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW), the International Convention on the Elimination of all forms of Racial Discrimination (ICERD), and the Convention on the Rights of Persons with Disabilities (CRPD).

¹⁹ See Marcos Orellana, "[Right to science in the context of toxic substances" \(A/HRC/48/61\)](#)."

²⁰ See CESCR, "[General comment No. 25 \(2020\) on science and economic, social and cultural rights" \(E/C.12/GC/25\)](#)."

5. Enabling a safe space for scientific enquiry

An enabling environment for scientific enquiry, requires, *inter alia*, that scientists be free from undue pressure to act in any way contrary to their scientific responsibility. The right to freedom of expression, read together with the right to science, safeguards the space for scientists to communicate their scientific findings freely and openly without threat of harassment or other retaliation.²¹

Scientists, including citizen scientists and Indigenous and local knowledge holders, who expose the negative impacts of toxics are human rights defenders. They are often subject to attacks, threats, smear campaigns, intimidation and harassment by entities with a vested financial interest in the marketing of hazardous substances. Such actions include legal action, accusations of misconduct, withdrawal of funding, censorship, thwarting career progression, loss of employment, loss or denial of tenure and intimidation of family members.²² According to the Special Rapporteur in the field of cultural rights, “all such practices seriously undermine the right to science, lead to the weakening of public institutions and the dysfunction of science-policy interfaces, open wider the door to misinformation and disinformation and impede the adoption of science-based solutions for the well-being of societies”.²³

- **The new panel should establish a system to prevent and address intimidation and reprisals against anyone engaging with the work of the Panel.**

6. International cooperation

The United Nations Charter, the International Covenant on Economic, Social and Cultural Rights, the Declaration on the Right to Development and other human rights instruments, impose upon States the duty to cooperate to ensure the realization of all human rights.²⁴ Other global treaties and instruments, such as multilateral environmental agreements including the Basel, Rotterdam and Stockholm Conventions on hazardous chemicals and wastes, and the Minamata Convention on mercury, provide guidance on how international cooperation and technical assistance efforts could effectively prevent or minimize, in an environmentally sound manner, the risks stemming from exposure to hazardous substances.

The right to science requires that States foster the development of international cooperation in science. Recognizing the existence of deep international disparities among countries in science and technology, the Committee on Economic, Social and Cultural Rights identified as core to the right to science the obligation to foster the development of international contacts and cooperation. The Committee goes further and stipulates that “developed States should contribute to the development of science and technology in developing countries, adopting measures to achieve this purpose, such as allocating development aid and funding towards building and improving scientific education, research and training in developing countries, promoting collaboration between scientific communities of developed and developing countries to meet the needs of all countries and facilitating their progress while respecting national regulations”.²⁵ The Committee also highlights that many environmental and other risks are transnational and cannot be adequately addressed without robust international cooperation. Companies and regulators must use robust independent science to avoid imposing human rights costs of those not in the transaction.

²¹ Marcos Orellana, [“Right to science in the context of toxic substances” \(A/HRC/48/61\)](#).

²² This directly threatens the “freedom indispensable for scientific research” recognized in article 15 (3) of the International Covenant on Economic, Social and Cultural Rights, with a chilling effect on the broad scientific community. See Marcos Orellana, [“Right to science in the context of toxic substances” \(A/HRC/48/61\)](#).

²³ Alexandra Xanthaki, [“Right to participate in science” \(A/HRC/55/44\)](#).

²⁴ The duty to cooperate internationally towards the fulfilment of all economic, social and cultural rights is established in article 2 of the Covenant, in articles 1, 2, 55 and 56 of the Charter of the United Nations and in the UN Declaration on the Right to Development.

²⁵ CESCR, [“General comment No. 25 \(2020\) on science and economic, social and cultural rights” \(E/C.12/GC/25\)](#).

- **Strengthened and effective international cooperation on technology transfer, mobilization of resources and sharing of scientific knowledge are essential to address and redress deep disparities between countries and guarantee the right of all people to a clean, healthy, and sustainable environment, for both present and future generations.**²⁶

Relevant standards

Right of everyone to enjoy the benefits from scientific progress and its applications

UDHR, article 27

“Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to **share in scientific advancement and its benefits.**”

ICESCR, article 15

“1. The States Parties to the present Covenant recognize the right of everyone:

(b) To enjoy the benefits of scientific progress and its applications;

3. The States Parties to the present Covenant undertake to **respect the freedom indispensable for scientific research** and creative activity.

4. The States Parties to the present Covenant recognize the benefits to be derived from the encouragement and **development of international contacts and co-operation in the scientific and cultural fields.**”

Right to Health

ICESCR, article 12

1. The States Parties to the present Covenant recognize the **right of everyone to the enjoyment of the highest attainable standard of physical and mental health.**

CRC, article 24

1. States Parties recognize **the right of the child to the enjoyment of the highest attainable standard of health** and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services.

2. States Parties shall pursue full implementation of this right and, in particular, shall take appropriate measures:

(c) To combat disease and malnutrition, including within the framework of primary health care, through, inter alia, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, **taking into consideration the dangers and risks of environmental pollution.**

Right to a Clean, Healthy and Sustainable Environment

UN GA Resolution 76/300

1. *Recognizes* the right to a clean, healthy and sustainable environment as a human right;

2. *Notes* that the right to a clean, healthy and sustainable environment is related to other rights and existing international law;

3. *Affirms* that the promotion of the human right to a clean, healthy and sustainable environment **requires the full implementation of the multilateral environmental agreements under the principles of international environmental law;**

²⁶ See also 1992 Rio Declaration on Environment and Development: Principle 3 The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.