

Chemicals and Waste Issues of Concern:

A Summary Analysis of Stakeholders' Views on Priorities for Further Work and Potential Further International Action

Advance - Unedited

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Foreword

Chemicals play a fundamental role in our lives. They are essential building blocks for medicines, consumer products, food production and more. They are ubiquitous in a way that often escapes notice as we produce, use and discard products. Meanwhile, hazardous, and often long-lived chemicals are polluting our air, water, land, and bodies, contributing to all three pillars of the planetary crisis: climate change, nature and biodiversity loss, and pollution and waste. The sound management of chemicals and waste is thus crucial.

In 2020, UNEP published an Assessment Report¹ on 19 chemicals and waste issues of concern which pose risks to human health and the environment². The Report concluded that while many countries have increasingly implemented regulations for their sound management, urgent international concerted action is needed to solve them globally.

Today, I am delighted to preface the present report, which was requested by the Environment Assembly at its last session³. The report offers a summary analysis of views from Member States and other stakeholders on priorities for further work, including potential further international action on each of the 19 issues of concern. I would like to extend my heartfelt gratitude to all contributors for sharing their views, knowledge, and expertise through the global consultation process over the last year. One clear and unequivocal message that emerged is that further international action is imperative for each individual issue of concern, echoing the Assessment Report and its recommendations.

The challenges ahead of us call for our collective action and our collective creativity, to embrace opportunities to identify and implement efficient and effective solutions for a pollution-free planet.

As highlighted in this report, it is increasingly clear that responses on a chemical-by-chemical basis are no longer sufficient, or sensible. Instead, we need a systematic rethink of how we address current issues of concern and how we can prevent new issues of concern arising. We need to move towards a more holistic and coordinated approach, taking into account the pace of production and consumption. This is all the more necessary given the strong interlinkages and overlaps between the issues of concern, and the wide range of economic sectors that enter into play and are impacted. Going beyond a chemical-based approach towards a sector-based approach will facilitate strategic engagement with relevant actors, from producers to downstream users and waste managers, in developing

¹ UNEP(2020), An Assessment Report on Issues of Concern: Chemicals and Waste Issues Posing Risks to Human Health and the Environment

² These issues include eleven issues for which emerging evidence of risks had been identified by the Global Chemicals Outlook II – From Legacies to Innovative Solutions: Implementing the 2030 Agenda for Sustainable Development and GCO II, and eight emerging policy issues or other issues of concern identified under the Strategic Approach to International Chemicals Management

³ UNEA Resolution 5/7

and implementing holistic solutions. Jointly, relevant actors can explore the most suitable and sustainable options and alternatives taking into account environmental, human health, economic and social perspectives.

I am therefore pleased to see growing recognition of the need for sector-specific life-cycle approaches. For easy and accessible information down to the consumer and waste management levels on chemicals found in products. For the grouping of substances by similar intrinsic properties, considering the impacts of mixtures on our health and environment, and taking into account the full life-cycle of specific chemicals and products.

The consultation further highlighted the importance of integrating efforts to address the sound management of chemicals and waste with other environmental and societal priorities (e.g., climate, biodiversity, human rights, labour standards). Solving chemicals and waste issues of concern is a pre-requisite of sustainable development. It is a shared responsibility, which must involve all actors across all sectors and stakeholder groups. This means engagement with the private sector, policymakers, civil society, and scientists from a broad range of disciplines. This will be key in ensuring a just transition to an environmentally sustainable economy, one that contributes to the goals of decent work for all, social inclusion, protection of human rights and the eradication of poverty.

We will need strong commitment, action, and support from a broad range of sectors, including finance, towards the establishment of the necessary enabling environment and the transition to sustainable alternatives. Transparency, access to information and awareness raising throughout the life-cycles of chemicals, materials and products are key levers for mobilizing sectors and actors, with particular attention to the populations at greatest risk.

This report, and the sixth session of the United Nations Environment Assembly (UNEA 6), come at a good time. In the coming months, the international community will make operational the landmark Global Framework on Chemicals for a planet free of harm from chemicals and waste, adopted just a few months ago in Bonn, Germany, and the Kunming-Montreal Global Biodiversity Framework. We are also in the final year of the negotiations of a global legally binding instrument on plastic pollution and of a Science-Policy Panel on chemicals, waste, and pollution prevention.

Together with existing international agreements, these new instruments will offer new opportunities and create a new momentum towards a holistic and coordinated approach across environmental and societal priorities and across sectors. For example, taken together, they can enable us to transition towards a future sustainable agriculture that ensures global food security. One which is free from highly hazardous pesticides, plastic pollution, antimicrobial resistance and other negative impacts on health, nature, and biodiversity.

Our lives are intertwined with chemicals, yet the repercussions of chemicals and waste issues of concern are unsustainable. I am confident that the present report,

along with the 2020 Assessment Report, will serve as further inspiration for ambitious, proactive action. Also, as support for efforts to reduce the risks and harm from the unsound management of chemicals and waste and to promote a sustainable future. We have great challenges and opportunities ahead of us. With concerted efforts by the international community and all sectoral actors, we will succeed in achieving sustainable development!

Sheila Aggarwal-Khan
Director
Industry and Economy Division
United Nations Environment Programme

List of Acronyms

BPA	Bisphenol A
BRS	The Basel, Rotterdam, and Stockholm Conventions
EDCs	Endocrine disrupting chemicals
EPPPs	Environmentally persistent pharmaceutical pollutants
GCO	Global Chemicals Outlook
HHPs	Highly hazardous pesticides
HSLEEP	Hazardous Substances in the Life Cycle of Electrical and Electronic Products
ICCM	International Conference on Chemical Management
ILO	International Labour Organization
OECD	Organisation for Economic Co-operation and Development
PAHs	Polycyclic aromatic hydrocarbons
PFASs	Per- and polyfluoroalkyl substances
SAICM	The Strategic Approach to International Chemicals Management
UNEA	United Nations Environment Assembly
UNEP	United Nations Environment Programme
WHO	World Health Organization

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Executive Summary

The United Nations Environment Assembly (UNEA) at its resumed fifth session requested the Executive Director of the United Nations Environment Programme (UNEP) to seek views from Member States and other stakeholders on priorities for further work, building on existing measures and initiatives, and on potential further international action on the 19 issues discussed in the “Assessment Report on Issues of Concern: Chemicals and Waste Issues Posing Risks to Human Health and the Environment” (UNEP 2020). UNEA also requested a summary analysis of the views received for consideration by the Assembly and other international bodies, including the International Conference on Chemicals Management (ICCM).

In response, UNEP conducted a consultation process to gather views from Member States and other stakeholders (hereafter jointly referred to as “stakeholders”). This included a call for written inputs and a global consultation meeting, during which close to 200 participants exchanged views.⁴

The summary analysis of the contributions to this consultation is set out in the following report. A detailed summary for each issue is presented in the annex, which contains valuable information from stakeholders that may be helpful in discussions of further action.

Overarching considerations from Stakeholders across the issues of concern

Stakeholders shared many cross-cutting insights of relevance to the 19 issues of concern, as well as to the sound management of hazardous chemicals and waste more broadly:

- i. The majority of stakeholders indicated that international action is needed to address each of the 19 issues of concern. They stressed the harmful impacts of hazardous chemicals and waste on human health and the environment and emphasized the critical links between the health of ecosystems and human well-being.
- ii. Stakeholders cited a series of principles and approaches that may guide UNEA in considering further action, including the polluter pays principle, the precautionary approach, the environmental democracy principle, the principle of Common but Differentiated Responsibilities, as well as extended producer responsibility for pollution. Stakeholders emphasized the disproportionate impacts of hazardous chemicals and chemical pollution on at-risk populations, including: women, infants, and children; the elderly; people with certain medical conditions; people who are socioeconomically disadvantaged; and workers, including in the informal sector.

⁴ UNEP received 71 written responses by 25 August 2023, reflecting the views of stakeholders from governments, intergovernmental organizations, civil society, the private sector, and academia. All written contributions received can be found in full on the UNEP website (UNEP 2023).

- iii. Transparency and access to information throughout the lifecycles of chemicals and products need to be enhanced, particularly with regard to chemicals in products, allowing informed decisions by policymakers, businesses, and consumers, as well as adequate regulatory responses.
- iv. Education, awareness raising, and knowledge sharing are critical, as many of the risks posed by chemicals are poorly communicated.
- v. Solutions should be holistic. Many stakeholders emphasized that instead of dealing with substances one-by-one, future work should facilitate faster and broader responses to risks, through so-called “grouping approaches.” It is also essential to break down silos among issues, address interconnected agendas, and engage all relevant sectors and actors throughout the lifecycles of chemicals and products. Stakeholders identified a breadth of possible connections with other international agendas, as well as gaps where there is currently no international body with a mandate for action.

Stakeholder views on possible concrete actions on the issues of concern

The 19 issues were grouped to facilitate their consideration during the consultation process. They could be organized differently in future consideration of these issues.

Metals and Metalloids

This group comprises arsenic, cadmium, lead, lead in paint (discussed as a distinct issue, as it was identified as an issue of concern by ICCM2 in 2009), and organotins. Stakeholders emphasized the significant negative impacts on human health and the environment associated with exposure to these metals and metalloids. While many stakeholders said further action is urgently needed for all elements in this group, some called for prioritizing lead and cadmium.

Many stakeholders called for a legally binding instrument similar to the Minamata Convention on Mercury. Some suggested such an instrument could address all metals and metalloids covered in the Assessment Report, while others preferred to prioritize a subset. Stakeholders also highlighted the value of partnerships, noting that an initiative similar to the Global Mercury Partnership could facilitate action during the time required to develop a legally binding instrument. Some stakeholders stressed the need to avoid duplication of work and suggested expanding the remit of or otherwise incorporating further action into existing instruments. Many stakeholders further emphasized the need to improve transparency related to uses and releases of metals and metalloids.

Pesticides

This group comprises highly hazardous pesticides (HHPs), glyphosate, and neonicotinoids. Many stakeholders supported international action on these issues, citing their impacts on human health and the environment. Others stated that the evidence of harm is less clear or disputed. Some stakeholders noted the importance

of pesticides to food production, with some stating that transitioning away from widely used, affordable, and readily available chemicals may be economically disruptive. Stakeholders identified significant commercial interests in some of the substances covered in this group.

Many stakeholders called for improving labelling requirements, citing concerns about the health impacts of pesticides on farmworkers, among others. Some expressed concern about exports of HHPs from those high-income countries where they are banned to lower-income countries with weaker regulatory controls.⁵

Pharmaceuticals

A majority of respondents viewed environmentally persistent pharmaceutical pollutants as high or very high priorities for action. Many identified this issue as a rapidly growing problem due to the increasing use of pharmaceuticals around the world, citing in particular the impacts of pharmaceuticals on the environment. Many called for a coordinated international response, with some noting that lack of visibility is a key obstacle to action. In addition, a set of concrete actions that may be taken by various actors along the lifecycle of pharmaceuticals was identified.

Chemicals in products

This broad group includes the SAICM issues of concern “chemicals in products,” hazardous substances in the lifecycle of electrical and electronic products (HSLEEP), classes of chemicals (endocrine disrupting chemicals (EDCs), per- and polyfluoroalkyl substances (PFASs), microplastics, phthalates, and nanomaterials), bisphenol A (BPA) and triclosan. Many stakeholders noted that there are overlaps in these categories; for example, phthalates, BPA, PFASs, and triclosan, among others, could be addressed as part of action on EDCs.

Key challenges cited include a lack of knowledge about various products’ chemical content due to poor labelling and lack of implementation of the Globally Harmonized System (GHS) for chemical substances and mixtures, as well as a lack of information-sharing across the lifecycles of chemicals and products. Many stakeholders said children are especially at risk due to the use of certain chemicals of concern in toys and other products. Many stakeholders noted that the new Global Framework on Chemicals, the future Science-Policy Panel to contribute further to the sound management of chemicals and waste and to prevent pollution, and the international legally binding instrument to address plastic pollution currently under negotiation could play a significant role in addressing these issues. Some favoured using existing legally binding instruments to address HSLEEP, microplastics, PFASs, and PAHs.

Sectors highlighted as relevant to issues of concern

⁵ Please note that Target A7 of the Global Framework on Chemicals is to phase out HHPs by 2035 “in agriculture where the risks have not been managed and where safer and affordable alternatives are available, and to promote transition to and make available those alternatives.”

A wide range of sectors were noted as particularly relevant, highlighting the need for sector-based and encompassing approaches that go beyond a chemical-by-chemical perspective.

Looking forward: options for next steps

Stakeholders have called for new legally binding or voluntary instruments to address certain issues of concern. UNEP provided a comprehensive but not exhaustive overview of existing instruments and actions in the Assessment Report, with examples of international actions, national legislation, and voluntary initiatives. In some cases, there may be scope to endorse, promote, replicate, or scale up these efforts. In other cases, new international initiatives may be appropriate.

UNEA may wish to take into account several factors when considering the way forward, including whether to build on existing mechanisms or establish new ones; the need for capacity building; the need for novel and holistic approaches; and the amount of time different mechanisms require to effect change (for instance, in the case of legally binding instruments, the time between the negotiations, entry into force, and implementation).

In particular, the consultation highlighted the importance of holistic approaches and identified strong links with other global agendas, including biodiversity, climate change, human rights, health, labour protection, trade, and food security. There is therefore an important role for and a need to coordinate with international forums including the International Conference for the Global Framework on Chemicals, other UN agencies, and the Basel, Rotterdam, Stockholm and Minamata conventions. The new instrument on plastic pollution and the Science-Policy Panel, both currently being negotiated, will also be very relevant. It may require action by UNEA, the International Conference of the Global Framework on Chemicals, and other bodies and instruments to ensure that these connections are made.

The report also highlights the need for novel and better approaches. Innovative thinking will be needed about the ways chemicals and waste are managed and regulated across lifecycles in different sectors. It may be necessary to consider chemicals in groups rather than one by one, and to increase engagement with and commitment from economic sectors. Factors that will be key to creating an enabling environment to successfully address the above and future issues include enhancing transparency (including through improved and standardized labelling chemicals of products), awareness raising, monitoring, enforcement, and leveraging finance from public and private sources.

This summary analysis report, together with the Assessment report of the issues of concern itself, may provide a basis for the Environment Assembly to consider what further action may be necessary.

References

- United Nations Environment Programme (2020). *An Assessment Report on Issues of Concern: Chemicals and Waste Issues Posing Risks to Human Health and the Environment*. Geneva.
<https://wedocs.unep.org/bitstream/handle/20.500.11822/33807/ARIC.pdf?sequence=1&isAllowed=y>.
- United Nations Environment Programme (2023). Written submissions on chemicals and waste issues of concern. <https://www.unep.org/resources/emerging-issues/written-submissions-chemicals-and-waste-issues-concern>. Accessed 13 February 2024.

1. Introduction

At its resumed fifth session, the United Nations Environment Assembly (UNEA) requested through its resolution 5/7 (United Nations Environment Programme [UNEP] 2022) the Executive Director of the United Nations Environment Programme (UNEP) to seek views from Member States and other stakeholders on priorities for further work, building on existing measures and initiatives, and on potential further international action on the 19 issues discussed in the “Assessment Report on Issues of Concern: Chemicals and Waste Issues Posing Risks to Human Health and the Environment” (UNEP 2020). UNEA further requested the preparation of a summary analysis of the views received for consideration by the Environment Assembly and other international bodies, including the International Conference on Chemicals Management (ICCM).

In response to this request, UNEP initiated a consultation process to gather views from Member States and other stakeholders (hereafter jointly referred to as “stakeholders”). This process included a global consultation meeting held in July 2023 in Geneva, Switzerland and online, during which close to 200 participants exchanged views on the 19 issues of concern. Views were also collected through a call for written inputs between June and August 2023, in response to which UNEP received 71 contributions, including on behalf of groups of stakeholders⁶. Further information on the consultation process and submissions received is available in Appendices 1 and 2.

An interim progress report, based primarily on the information available from the global consultation meeting (UNEP 2023a), was made available as an information document⁷ to ICCM5.

Background

At its fourth session, in resolution 4/8⁸, UNEA requested the Executive Director of UNEP to develop a report on matters in which emerging evidence indicates a risk to human health and the environment, as identified by the Strategic Approach to International Chemicals Management (SAICM) and by the Global Chemicals Outlook II (GCO II) (UNEP 2019). In 2020, UNEP prepared an Assessment Report on Issues of Concern with the support of an international team of scientists. The objective of the report was to inform the international community about specific chemicals and waste issues of concern, based on a comprehensive review of existing published evidence.

⁶ For example, responses were received from a Regional Economic Integration Organization and its member states, as well as from global trade/industry associations or federations of civil society organizations representing multiple entities.

⁷ Document SAICM/ICCM.5/INF/20

⁸ Resolution UNEP/EA.4/Res.8, paragraph 14(f)

The Assessment Report addressed eight that are emerging policy issues or other issues of concern identified under SAICM and eleven issues for which emerging evidence of risks had been identified by GCO II, as indicated in Table 1.

Table 1: List of nineteen issues of concern covered by the Assessment Report

Emerging policy issues and other issues of concern identified under SAICM	Issues with emerging evidence of risks identified by GCO-II
<ol style="list-style-type: none"> 1. Chemicals in products (CiP) 2. Endocrine disrupting chemicals (EDCs) 3. Environmentally persistent pharmaceutical pollutants (EPPPs) 4. Hazardous substances in the lifecycle of electrical and electronic products (HSLEEP) 5. Highly hazardous pesticides (HHPs) 6. Lead in paint 7. Nanotechnology and manufactured nanomaterials (Nanomaterials) 8. Per- and polyfluoroalkyl substances (PFAS) 	<ol style="list-style-type: none"> 1. Arsenic 2. Bisphenol A (BPA) 3. Cadmium 4. Glyphosate 5. Lead 6. Microplastics 7. Neonicotinoids 8. Organotins 9. Phthalates 10. Polycyclic aromatic hydrocarbons (PAHs) 11. Triclosan

The Assessment Report concluded that concerted international action by all stakeholders at all levels is urgently required. At its resumed fifth session, UNEA urged Member States and invited other stakeholders to take further action to reduce or eliminate the risks associated with the issues of concern discussed in the Assessment Report.

Structure of the Summary Analysis

The present report outlines in Chapter 2 an analysis of views on overarching considerations expressed by Member States and other stakeholders on the issues of concern. Chapter 3 provides an overview of suggested concrete actions for the issues of concern, also considering sectoral approaches. Finally, Chapter 4 explores possible next steps, considering the global policy context. Appendices 1 and 2 provide an overview of the consultation process and submissions received. Detailed summaries of the written submissions for each issue of concern are presented in the annex to the present document. All submissions received are available on the UNEP website (UNEP 2023b).

2. Overarching considerations across the issues of concern based on feedback from stakeholders

This chapter provides an analysis of views on overarching considerations across the issues of concern expressed by Member States and other stakeholders during the global consultation meeting and in response to the call for written inputs.

The global consultation meeting provided an opportunity for a wide-ranging discussion. Throughout the meeting, stakeholders shared overarching ideas and preferences of relevance to the 19 issues of concern, as well as to the sound management of hazardous chemicals and waste in general. Many stakeholders reiterated and further elaborated on these points in their written submissions. These cross-cutting insights are summarized below.

i. *International action is needed to address the 19 issues of concern*

Most stakeholders who provided input to the process agreed with the overall conclusion of the Assessment Report that for each of the 19 issues of concern considered, further international action is needed. In particular, stakeholders stressed the harmful impacts of hazardous chemicals and waste on human health and the environment and emphasized the critical links between the health of ecosystems and human well-being.

Preferences for the kind of international action stakeholders considered to be most appropriate varied, ranging from voluntary initiatives to legally binding instruments or a combination. Some stakeholders cited the need for more research to support evidence-based decision-making on certain chemicals, saying that it could be wrong to rely on generalisations about risks. In some cases, a small number of stakeholders stated that existing research demonstrates that the chemicals are less hazardous than commonly perceived, and further action is not warranted. However, many said the scale of pollution and its health impacts are often underestimated and called for urgent action to find appropriate solutions.

Some stakeholders stressed that action at the international level is particularly important for countries with limited financial and technical capacities as well as weaker environmental and health-related regulations, as it can facilitate technical assistance, capacity building, and strengthening of national laws. Stakeholders noted that many countries lack adequate national capacity to assess risks and regulate chemicals appropriately, track the use of the chemicals (particularly in imported products), and enforce regulations. In written responses, 'difficulties in resource mobilization' was among the top two factors identified as preventing action at the national level for 13 of the 19 issues. Many stakeholders stated that international action could help to address these and related issues, including through technical assistance and capacity building.

Many stakeholders noted that three instruments under negotiation during the consultation process offer important new opportunities to address some of these issues. These instruments are:

- the 'beyond 2020' framework (now known as the Global Framework on Chemicals, which was adopted by ICCM5 in September 2023).
 - the international legally binding instrument on plastic pollution, including in the marine environment, called for pursuant to UNEA Resolution 5/14; and
 - the Science-Policy Panel to contribute further to the sound management of chemicals and waste and to prevent pollution, called for pursuant to UNEA Resolution 5/8.
- ii. ***Action should be guided by certain principles and approaches, including protecting vulnerable and at-risk populations and prioritizing human health and the environment over economic interests.***

Stakeholders identified several principles and approaches they said should guide UNEA in considering further action, including the polluter pays principle, the precautionary principle, the environmental democracy principle, the principle of Common but Differentiated Responsibilities, and extended producer responsibility for pollution caused by unsound management of chemicals and waste.

Stakeholders emphasized the importance of centering Indigenous Peoples and Indigenous Knowledge in future work. Many highlighted the need for intergenerational equity and called for deeper engagement with young people.

Many stakeholders called for transforming the ways in which hazardous chemicals are produced, consumed, and disposed of, saying that work on these issues needs to be part of a global shift towards a circular economy and the adoption of lifecycle approaches. Several noted it would be important to explore the use of non-chemical technologies and alternative chemicals (avoiding regrettable substitutions), with the latter being guided by green and sustainable chemistry. Several highlighted the need to consider product design, with the aim of facilitating a shift to a safe and sustainable circular economy. Some pointed to current work focused on the transformation of production and consumption practices to improve sustainability. Others cited the importance of learning from the successes and limitations of past implementation efforts, with many emphasizing that poor communication about chemicals and their risk has been a significant issue.

Many stakeholders emphasized the disproportionate impacts of hazardous chemicals and chemical pollution on vulnerable and at-risk populations, including women, infants and children, the elderly, people with certain medical conditions, certain workers, and socioeconomically disadvantaged communities. Exposure to pollutants may be heavily influenced by socioeconomic and demographic factors such as gender, race, class, location, and occupation. Stakeholders also emphasized that people around the world continue to bear a heavy toll in terms of diseases or early death resulting from on-the-job exposure to hazardous chemicals. Informal workers, predominantly women in many countries, may be particularly at risk due to a lack of occupational safety measures. Similarly, stakeholders stressed that many people are exposed to chemical pollution in their communities, including from nearby industrial sites (e.g., petrochemical plants) and dumping of waste.

Some stakeholders called for greater attention to these social determinants of health, with two stating that the “issue-based” approach risks relegating these social determinants of health to secondary considerations. These respondents said that measures of risks related to gender, race, or social class must be integrated into any discussion of Issues of Concern to ensure the relevance of priorities and effectiveness of actions.

Relatedly, many stakeholders expressed concerns about the prioritization of economic interests over human health and the environment and the role of the private sector in preventing action to address chemical pollution. In written submissions, stakeholders representing both governments and civil society stated that corruption or undue influence from commercial interests is limiting or preventing appropriate national action to protect human health and the environment. This concern was flagged across almost all 19 issues of concern.

iii. *Transparency and access to information needs to be enhanced*

Many stakeholders called for improvements in transparency and access to information throughout the chemicals' and products' lifecycles in usable forms, particularly with regard to the content and effects of chemicals in products. Several stakeholders highlighted the need for more accessible information about chemicals and their effects, as well as chemicals being used and traded. They emphasized that this is necessary to enable regulatory authorities to manage risks effectively and for actors along lifecycles to make informed decisions.

Many others highlighted that transparency and information sharing are vital to companies purchasing products or components for manufacturing, especially to ensure the sound management and disposal of products at their end of life. Several also underscored the importance of transparency and information disclosure, in a consistent manner, to enable consumers to make informed choices about the products they buy and use. Also, to support efficient recycling and waste treatment processes.

iv. *Education, awareness raising, and knowledge sharing are critical*

Stakeholders repeatedly emphasized the importance of awareness raising and education, saying the risks posed by many chemicals are unclear or poorly communicated to consumers and many labourers who are exposed in occupational settings. Many called for better guidance to support improved and safer use of chemicals, as well as management of waste containing hazardous substances.

“Difficulties sharing knowledge and coordinating action among stakeholders and across sectors” was among the top two factors identified as preventing progress for ten issues of concern.

v. *Solutions should be holistic, breaking down silos across environmental and societal priorities and engaging sectoral actors*

Prompt action was noted as necessary to mitigate the negative impacts of Issues of Concern. Many stakeholders highlighted the need to find more efficient ways of

addressing emerging issues, saying there are too many individual issues of concern. Several highlighted the need to “get ahead of the game” as a key regulatory challenge, emphasizing importance of managing chemicals before they become problems.

Stakeholders also stressed the need for holistic approaches to addressing chemicals. Many said that instead of dealing with substances one-by-one, as has been done in the past, future work should facilitate faster and broader responses to risks, in particular through so-called “grouping approaches”. For example, several stakeholders highlighted the possibility of addressing multiple metals and metalloids with a common approach. Additionally, there is overlap between many of the 19 issues⁹. For example, lead in paint could be addressed as a specific issue or as part of wider efforts to address all aspects of lead. Similarly, stakeholders indicated that many chemicals (e.g., bisphenol A, phthalates and triclosan) could be addressed as part of further action on EDCs, and many of the chemicals or groups of chemicals covered as individual issues might also be addressed by action on “chemicals in products.”

Stakeholders also underscored the need to break down silos between issues, fostering sector level engagement and improving coordination across global agendas. Many stakeholders indeed highlighted the need for action at all levels – international, regional, national, and local – and for a sector-based approach, with all relevant actors along the chemical life cycle having a part to play, including governments, intergovernmental organizations, the private sector, the informal sector, academia, civil society, and consumers.

Stakeholders' written responses demonstrate the broad extent of possible connections with other international agendas, such as climate change, biodiversity, human rights, health, labour protection, trade, and food security. Several stakeholders called for improving coordination across these agendas. Indeed, there are few issues for which a single international agenda could effectively address all the challenges at stake. Many stakeholders suggested that existing international organisations and instruments have a significant role to play, and in some cases could expand their remit to address many of the issues of concern. Several noted that there are gaps for some issues or component parts of an issue, where there is currently no international body with a mandate for action.

Relatedly, many stakeholders emphasized the importance of involving the private sector, including downstream industrial users, in efforts to address chemicals of concern, in a coherent and concerted manner. This would support the development and implementation of practical solutions. The use of corporate reporting mechanisms, sustainable public procurement, and labelling systems were cited as existing drivers that could be used to incorporate measures related to sound management of chemicals and waste. Stakeholders also highlighted the importance of working with informal sectors of the economy, particularly in

⁹ This reflects the fact the issues were identified by two routes – some were designated by ICCM, others came from the GCO II process.

developing countries, in managing chemicals and waste. For example, waste pickers play a significant role in reducing the amount of plastic waste that is leaked into the environment, thereby protecting both human health and the environment.

Stakeholders identified many economic sectors which need to be involved in actions to address chemical pollution, including but not limited to textiles, agriculture, pharmaceuticals, food and beverage, manufacturing, construction, and plastics. In stakeholders' written contributions, the health and waste management sectors were most frequently identified as having important linkages to action on chemical pollution. However, stakeholders identified a wide range of sectors with linkages to individual issues or groups of issues.

Advance - Unedited

3. Stakeholder views on possible concrete actions on the issues of concern

This chapter summarizes the inputs received during the consultation process on individual issues of concern. The issues are presented in groups based on their similarities: metals and metalloids, pesticides, pharmaceutical substances, and chemicals in products¹⁰. They could be organized differently, and the groups are not intended to pre-empt future consideration of any of these issues. The chapter also highlights the sectors identified by stakeholders as most relevant as well as their perspectives on priorities for further international action.

The annex to the present document presents more detailed summaries of the written submissions for each issue of concern. These summaries contain valuable information about stakeholders' preferences and the rationales for their views. The summaries below and those presented in the annex may be helpful resources when considering further work to be undertaken. Individual written submissions received that informed these summaries are available on the UNEP website (UNEP 2023b).

Metals and Metalloids

During the global consultation meeting, stakeholders emphasized the significant negative impacts on human health and the environment associated with exposure to these metals and metalloids, which include arsenic, cadmium, lead, and organotins. In addition to lead, lead in paint was discussed as a distinct issue, as it was identified as a specific issue of concern by ICCM2 in 2009. While many stakeholders said further action is urgently needed for all metals and metalloids in this group, some called for prioritizing lead and cadmium.

In both the global consultation meeting and in the written contributions, many stakeholders called for establishing a legally binding instrument like the Minamata Convention on Mercury. Some respondents suggested such an instrument could address all metals and metalloids covered in the Assessment Report, and others preferred to address a subset of those considered to be of the highest priority. Some pointed out that a new treaty could be dynamic, initially covering just one or two metals, with provisions enabling parties to add others in the future. Other stakeholders stressed the need to avoid duplication of work and suggested expanding the remit or otherwise incorporating further action into existing instruments, including the Minamata Convention. Several called for promoting synergies among existing multilateral environmental agreements.

Some said that dealing with metals and metalloids as a group would help engage more partners and suggested it would be difficult to set up yet another instrument

¹⁰ The groups used during the global consultation meeting were slightly different, namely: metals and metalloids, chemicals in products, and bioactive substances. Drawing on the submissions received during the consultation, we have reorganized the issues to reflect the views of stakeholders (e.g., including triclosan in the chemicals in products cluster).

for international action on a single chemical. Stakeholders indicated partnerships (similar to the Global Mercury Partnership) could facilitate action during the time required to develop a legally binding instrument. Some highlighted the need to ensure transparent access to information, including for civil society.

In the written consultation, stakeholders said health, sustainable consumption and production, agriculture and food, and waste were among the top international agendas closely linked to metals and metalloids. Stakeholders also highlighted the relevance of the health and electronics sectors.

Pesticides

This group comprises highly hazardous pesticides (HHPs), glyphosate and neonicotinoids. For the majority of stakeholders, the pesticides in this group are already recognized as hazardous, while for others the evidence seems to be less clear or disputed. In particular, while the majority of stakeholders supported international action on glyphosate and cited concerns about the impacts of this widely used herbicide on human health and the environment, a small number of stakeholders cited uncertainty about these impacts. One stakeholder pointed to disagreement among scientific studies and regulatory bodies. Many stakeholders also noted that the effects of neonicotinoids are not well understood but said the impacts on bees are cause for concern. A majority of stakeholders categorized this class of chemicals as a high or very high priority for action.

Stakeholders identified significant commercial interests in some of the substances covered in this group, noting cases in which industry is highly influential and governments are not actively involved in chemical regulation. Relatedly, some stakeholders expressed concern about exports of highly hazardous pesticides from high-income countries where they are banned to lower income countries with weaker regulatory controls.

Many stakeholders identified close connections to international agendas on health and agriculture and food production, with some noting that the pesticides in particular pose a risk to farmworkers in many countries due to inadequate personal protective equipment and poor or absent labelling of these chemicals with information about usage and risks. Various stakeholders called for improving labelling requirements for pesticides and other bioactive substances.

Several stakeholders emphasized the importance of these pesticides to food production, with some stating that transitioning away from widely used chemicals may be economically disruptive. Some emphasized that substitutes must be at least as affordable and accessible as the chemicals they are meant to replace.

Pharmaceutical substances

A majority of stakeholders viewed environmentally persistent pharmaceutical pollutants, which are closely linked to the health sector, as high or very high priorities for action. Most stakeholders called for voluntary initiatives such as information sharing and awareness raising to address these issues, followed by establishment of

a legally binding instrument and soft law. Some noted that lack of visibility is a key obstacle to action. One stakeholder described these pollutants as a “silent” but rapidly growing problem due to the rising rates of pharmaceutical use around the world. A case study of taking a holistic, sector-based approach to addressing environmentally persistent pharmaceutical pollutants, based on the global consultation, is presented in Box 1 below.

Box 1: Views expressed during the global consultation on a holistic, sector-based approach to addressing environmentally persistent pharmaceutical pollutants (EPPPs)

Pharmaceuticals play a crucial role in safeguarding human and animal health, while also bolstering food production and economic prosperity. However, their release into the environment throughout their life cycle poses significant threats to humans, wildlife, and ecosystems. This includes endangering vulture species, causing reproductive failures in fish, and fostering the development of antimicrobial resistance. Internationally, the issue of environmentally persistent pharmaceutical pollutants (EPPPs) gained recognition as a pressing concern under SAICM in 2015.

During the global consultation, some stakeholders emphasized the importance of addressing EPPPs from a pharmaceutical sector standpoint, calling for a comprehensive approach that considers the entire lifecycle of these substances. They stressed the interconnection of pharmaceutical pollutants with broader challenges like biodiversity loss, agriculture and food security, human rights, and sustainable development goals, echoing the key findings outlined in the Issues of Concern report.

Moreover, stakeholders identified specific actions that relevant actors can undertake at different stages of pharmaceuticals’ lifecycle. These actions complement broader, concerted efforts across various sectors and regions to mitigate the environmental impact of pharmaceuticals.

By international and national policymakers

- Develop and enforce guidelines and standards for safe design, approval, production, prescription, use, take-back and disposal of pharmaceuticals, e.g., by updating Good Manufacturing Practices (GMP) to include limiting environmental releases during manufacture and Risk Management Plans (RMPs) to include plans to prevent environmental releases
- Develop incentives programs to recognize and reward pharmaceutical companies, hospitals and wastewater treatment plants that demonstrate best practices, e.g., through national procurement policies using the Sustainable Procurement Index for Health
- Encourage transitioning to safer alternatives through public awareness campaigns, guideline development and incentive programs
- Enhance public health measures to reduce infections, and thus, the use of pharmaceuticals

By pharmaceutical companies

- Ensure transparent material declarations to disclose information on the environmental impacts of pharmaceuticals, such as persistence, bioaccumulation, and toxicity
- Integrate strategies to design EPPPs into broader initiatives aimed at green chemistry, sustainable manufacturing, green design, and circular economy principles
- Develop codes of conduct for the responsible management of pharmaceuticals to reduce their environmental and human-health impacts once released.

By healthcare facilities including pharmacies

- Establish collection programs for expired or unused medications.
- Enhance doctors' training to reduce non-essential prescriptions when safer alternatives are available.

By scientists

- Monitoring the levels of pharmaceuticals in the environment and their impacts
- Research into safer alternatives and advanced treatment technologies

Chemicals in products

This group includes a range of issues of concern/hazardous chemicals where many of the risks arise through exposure to consumer products. It includes "chemicals in products," which covers the issue broadly in the context of access to information and was identified as an emerging policy issue under SAICM (now superseded by the Global Framework on Chemicals). This grouping also includes particular products which can contain hazardous chemicals (e.g., HSLEEP), classes of chemicals (EDCs, PFASs, microplastics, phthalates, PAHs, and nanotechnology and manufactured nanomaterials), and two specific substances (BPA and triclosan). Many respondents noted overlaps in these categories; for example, phthalates, BPA, and PFASs, among others, could be addressed as part of action on EDCs.

For many of these issues, the main challenges are lack of knowledge, transparency, and information-sharing throughout the lifecycle of chemicals and products, as well as the need for better science. Many stakeholders said that a key obstacle to addressing these issues is lack of information about which chemicals are contained in products due to poor or non-existent labelling. Several stakeholders noted that children are especially at risk of exposure to certain chemicals of concern in products, citing EDCs and phthalates in particular, which are found in many toys and other products.

Voluntary initiatives such as information sharing and awareness raising were favoured by many for addressing issues including "chemicals in products" (as defined by SAICM), EDCs, BPA, and nanotechnology and manufactured nanomaterials. Stakeholders favoured establishing or using existing legally binding instruments (e.g., the Stockholm Convention and Basel Convention) to address HSLEEP, microplastics, PFASs, and PAHs. Many stakeholders highlighted that SAICM (now superseded by the Global Framework on Chemicals), the future Science-Policy Panel, and the proposed instrument to address plastic pollution could play a significant role in addressing many of these issues.

Stakeholders to the written consultation highlighted connections to the health and sustainable consumption and production agendas. They also noted close links and ubiquity to a wide range of sectors, including electronics, textiles, health, construction, waste, retail, and agriculture and food production, among others.

Sectors highlighted as relevant to issues of concern

A range of sectors were noted as particularly relevant during the consultation process highlighting the need for sector-based and encompassing approaches that go beyond a chemical-by-chemical perspective.

Table 2 below shows the sectors that stakeholders highlighted most prominently in the written consultation as being of relevance to the 19 issues of concern.

Table 2: Sectors of relevance most highlighted by stakeholders

Sector of Relevance	Chemicals	Example of Relation
Health	Arsenic, BPA, cadmium, glyphosate, lead, microplastics, neonicotinoids, organotins, phthalates, PAHs, triclosan, CiP, EDCs, EPPPs, HSLEEP, HHPs, lead in paint, nano, PFASs	Various health risks associated with exposure to each chemical; some chemicals being used in health-care settings; antimicrobial resistance
Waste management	Arsenic, BPA, cadmium, glyphosate, lead, microplastics, neonicotinoids, organotins, phthalates, PAHs, triclosan, CiP, EDCs, EPPPs, HSLEEP, HHP, lead in paint, nano, PFASs	Leaching from waste; contamination in landfills and of recycled materials
Agriculture and food production	Arsenic, BPA, cadmium, glyphosate, microplastics, neonicotinoids, organotins, phthalates, PAHs, triclosan, CiP, EDCs, EPPPs, HHPs, PFASs	Chemical contamination in crops and soil; use in the fields, packaging, and processing
Construction	BPA, cadmium, microplastics, organotins, phthalates, PAHs, Triclosan, CIP, nano, PFASs	Use in construction materials and paints
Labour	Arsenic, glyphosate, lead, neonicotinoids, phthalates, EDCs, EPPPs, HSLEEP, Lead in Paint	Occupational exposure and risks in various industries
Electronics	BPA, cadmium, lead, microplastics, phthalates, CiP, HSLEEP, nano, PFASs	Presence in electronic components and devices
Pharmaceuticals	Arsenic, microplastics, triclosan, EDCs, EPPPs, nano	Use in pharmaceutical formulations, packaging, etc.
Retail	Microplastics, organotins, triclosan, CiP, HSLEEP, lead in paint	Presence in consumer products

Sector of Relevance	Chemicals	Example of Relation
Textiles	Microplastics, organotins, CiP, nano, PFAS, phthalates, EDCs,	Presence in textile treatments and fibers
Energy	Cadmium, lead, PAHs, CiP, EDCs, HSLEEP, nano, PFASs	Presence in energy production and storage
Transportation	Arsenic, Microplastics	Pollution from vehicle emissions and marine transportation; use in vehicles

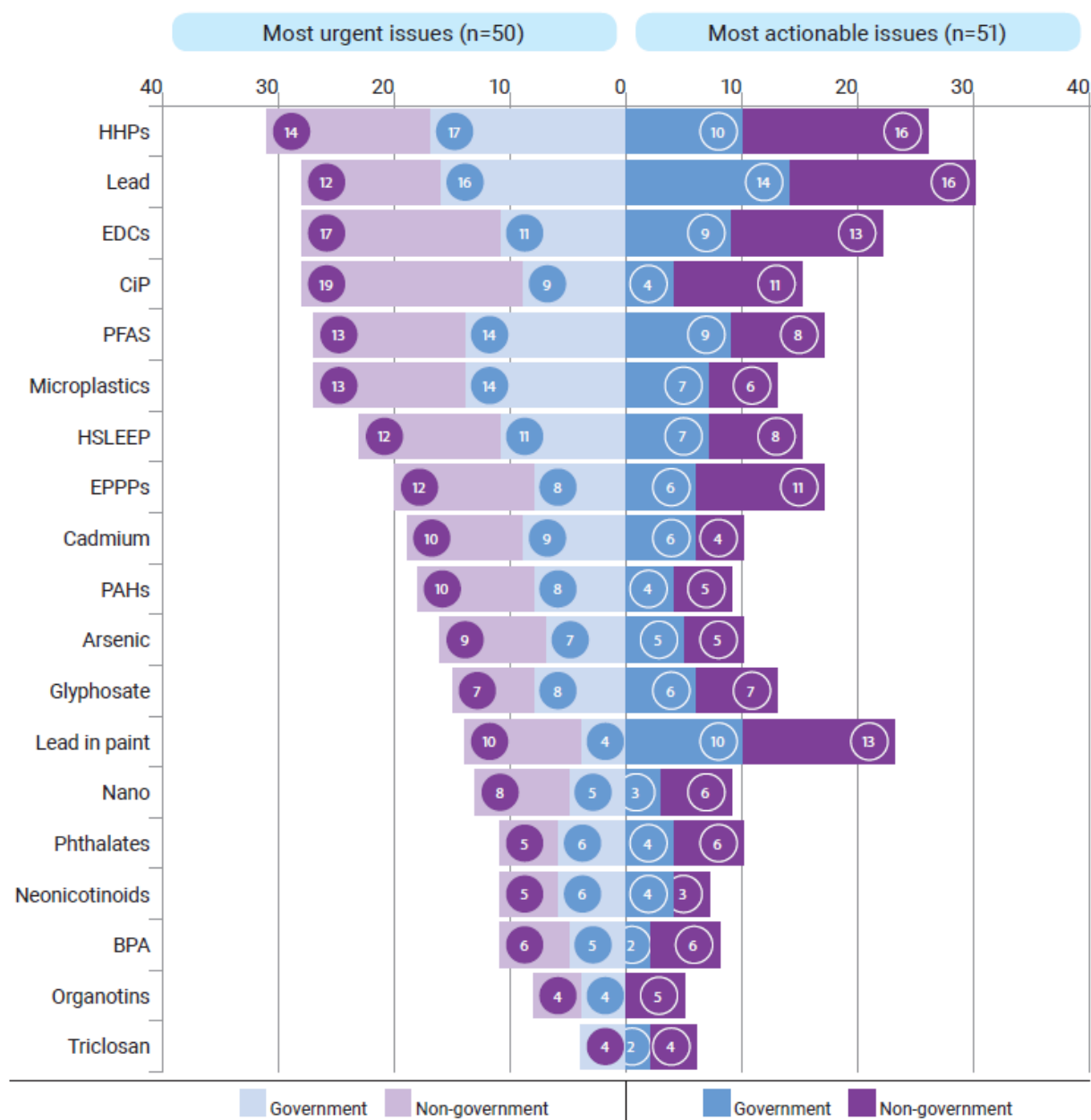
Note: The examples of relation given are applicable for some issues of concern but are not necessarily relevant to all. Furthermore, the mapping of sectors and list of chemicals is reflective of the highest selections made by stakeholders to the written consultation. This does not capture all of the issues of concern that are relevant to the corresponding sectors, and some sectors relevant to issues of concern may be missing.

Priorities for further international action

As part of the call for written inputs, stakeholders were invited to share their perspectives on which of the issues are the most urgent and which are the most actionable. Respondents could nominate more than one issue.

The issues cited as most urgent, listed in Figure 1 **Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.**, include highly hazardous pesticides, EDCs, lead, PFAS, chemicals in products, and microplastics, closely followed by HSLEEP, EPPPS, cadmium, PAHs, and arsenic. The issues cited as most actionable, as shown also in Figure 1, include lead, HHPs, lead in paint, and EDCs, followed by PFAS, EPPPs, HSLEEP and chemicals in products.

Figure 1: Views of Member States and of other Stakeholders on which issues are the most urgent and which issues are the most actionable.



Note: Respondents could select more than one option. Number of respondents (n) to the most urgent issues of concern = 50 and most actionable issues of concern = 51.

Figure 1 also shows that Member States and other stakeholders prioritized many of the same issues. Chemicals in products deviated from this trend, however, with more than twice the number of non-government respondents prioritizing this as urgent for action. Lead in paint and triclosan were also more heavily prioritized for action by non-government respondents than governments. Please note that some responses were provided on behalf of groups of stakeholders, however these are counted under their individual submissions.

4. Looking forward: Options for next steps

The views expressed by stakeholders throughout the consultation process reinforced the conclusions of GCO-II and the 2020 Assessment Report that business as usual is not an option and that further international action is needed to address the 19 issues of concern. UNEA and other international bodies – in particular the International Conference on the Global Framework on Chemicals – will need to consider what that action should be. This chapter puts forward a range of issues UNEA and other bodies may wish to consider, based on the views summarized earlier in this report, and taking into account recent developments and wider issues. This analysis may be helpful in stimulating further discussion of possible next steps.

General approaches

As described earlier, stakeholders have suggested a wealth of approaches, covering legally binding and voluntary measures or a combination of the two, and set out their views on priorities. They highlighted the relevance of existing global bodies, mechanisms, and instruments, as well as those currently under negotiation, and emphasized the need to build bridges with global agendas beyond chemicals and waste. Stakeholders suggested a number of key principles and approaches to guide action, including gender mainstreaming, holistic approaches, and broad engagement of stakeholders from diverse backgrounds.

Many stakeholders called for systems change and highlighted the need to embrace innovative thinking about the ways chemicals and waste are managed and regulated throughout their lifecycles. They also called for enhanced action and commitment from high impact sectors and beyond. In addition to employment and development opportunities the need to facilitate the emergence of novel business models that foster sustainable consumption and production was highlighted. Such business models could build upon extended producer responsibility and chemical leasing and use principles of green and sustainable chemistry.

Stakeholders also emphasized the limitations of a chemical-by-chemical approach to action and called for consideration of groups of substances, also citing the importance avoiding regrettable substitutions and burden shifting. They called for increased transparency and access to information on chemicals, awareness raising, with particular attention to populations at greatest risk, enhanced monitoring, and enforcement, as well as leveraging finance from public and private sources to support and foster action. Some stakeholders highlighted the importance of strengthening the implementation of existing instruments, such as the Basel, Rotterdam, and Stockholm Conventions, with the aim of increasing the transparency and traceability of chemicals in products throughout their lifecycles. These aspects will support establishment of the overarching enabling environment necessary to address the above and future issues.

Making the above possible is a shared responsibility among global entities and stakeholders. UNEA and other international bodies, and in many cases individual

Member States, will each need to decide on action(s) based in part on the evidence in the Assessment Report and the views set out in this present report. They should also take account of current negotiations in other forums and the practicalities of making progress, and will need to engage the broader community of relevant stakeholders, including high impact sectors.

The potential role of the International Conference on the Global Framework on Chemicals and of other international forums

At its fifth session, ICCM welcomed the UNEP Assessment Report and decided that all existing SAICM emerging policy issues and issues of concern should transition on an interim basis to "issues of concern" as part of the Global Framework on Chemicals. The International Conference on the Global Framework on Chemicals (referred to here as "the International Conference"), which has superseded ICCM, will determine their path under the new Framework.

In doing so as well as in adopting new issues of concern, the International Conference may wish to take note of several aspects of the present report. Amongst others, it may wish to consider potential approaches to grouping issues, and the relevance of expanding its work to include issues identified as priorities under GCO-II. The International Conference may also consider strengthening voluntary actions under the Global Framework on Chemicals for all issues of concern discussed in the present report.

This report may also inform the development of proposals for implementation programmes addressing the current issues of concern ahead of the next Conference, as well as the work of the global alliance on highly hazardous pesticides. The International Conference may also wish to explore how to further engage relevant economic sectors and actors throughout lifecycles, or how to address chemicals and products in a way that goes beyond the exchange of information.

The consultation process highlighted linkages between the issues of concern and several other international forums or instruments, including two currently under development: a Science-Policy Panel on chemicals, waste and pollution prevention and an international legally binding instrument on plastic pollution. A large number of chemicals are used in plastics, including many identified as issues of concern. Stakeholders highlighted the potential relevance of the instrument on plastic pollution to address issues such as PFASs, EDCs, or phthalates. Additionally, many stakeholders cited the potential relevance of the Science-Policy Panel to the identification and assessment of issues of concern. The Intergovernmental Negotiating Committee and the Open-ended Working Group may therefore wish to consider the findings of the present report.

Stakeholders also identified the potential role of the Basel, Rotterdam, Stockholm, and Minamata Conventions in continuing to address some of the issues of concern within their specific mandates and taking further actions to address other issues of concern, if this is decided by their respective governing bodies. UNEA may wish to

encourage the governing bodies of those Conventions to consider the findings of the present report. Preferred forums for further international action are highlighted in the

Box 2 below.

Similarly, the issues covered in the present report are of relevance to the bodies and instruments of closely linked other global agendas, including biodiversity, climate change, human rights, health, labor protection, trade, and food security. Many stakeholders emphasized the need to improve coordination across these agendas, calling for coherent strategies that can integrate work across instruments and break down silos that impede holistic approaches to action. This may require action by UNEA, the International Conference, and other bodies and instruments.

Box 2: Preferred forums for further international action

Stakeholders were invited to indicate for each issue of concern which international forum or instrument would be best placed to take the lead on further international action. For 15 of the 19 issues, SAICM/ICCM received the highest number of indications, and ranked second for the remaining four issues (HSLEEP, microplastics, neonicotinoids, and PFAS). In practice, these nominations now refer to the new Global Framework on Chemicals and the International Conference.

For the four issues for which SAICM/ICCM was not the most nominated forum, the following instruments received the most nominations: Basel Convention (HSLEEP), the Stockholm Convention (PFASs), the Rotterdam Convention (neonicotinoids), and the new instrument on plastic pollution (microplastics). UNEP/UNEA received the second highest number of nominations for 10 issues: arsenic, cadmium, lead, lead in paint, organotins, BPA, Chemicals in Products, nanotechnology and manufactured nanomaterials, PAHs and triclosan.

It is perhaps to be expected that the new Global Framework on Chemicals would be seen as a highly relevant forum for addressing many of the issues – indeed several of them had already been identified by ICCM and were receiving active attention under SAICM. Many stakeholders highlighted the value of enhancing multisectoral cooperation to strengthen data sharing and build capacities of stakeholders. With its multisectoral and multi-stakeholder approach, the Global Framework on Chemicals may be seen as well placed to address complex issues which span many agendas and sectors.

Stakeholders also saw UNEP/UNEA as highly relevant; an intergovernmental body such as UNEA can take the lead in establishing the negotiations process of a legally binding instrument. It should be noted that UNEA may invite other bodies, such as WHO, to participate in this work, as has been the case with mercury, plastics, and the Science-Policy Panel.

Finding the way(s) forward

UNEP provided a comprehensive but not exhaustive overview of existing instruments and actions in the Assessment Report, with examples of voluntary

actions, national legislation, and international action. In some cases, there may be scope to endorse, promote, replicate, or scale up these efforts. In other cases, new international initiatives may be appropriate. Further analysis may be needed to assess these options.

Stakeholders called for new legally binding or voluntary instruments to address certain issues of concern. This is particularly the case for metals and metalloids – many stakeholders called for a new global instrument or enhanced voluntary measures, but there were a variety of suggestions as to the scope (for example, which metals should be covered) and approach. One option would be for UNEA to consider reviewing possible enhanced voluntary measures and new or existing international legal instruments for metals and metalloids, and consider establishing intersessional work to carry out the review in time for UNEA-7.

More generally, UNEA may wish to take account of several factors when considering the most appropriate way forward. These include:

- **The time needed to secure change:** It takes years to negotiate and secure the entry into force and implementation of a legally binding measure, whereas partnerships and voluntary initiatives can have an impact sooner. It may be that a combination of measures could be most effective. In the case of mercury, for example, voluntary partnerships made significant progress while the legally binding Minamata convention was being negotiated, and indeed contributed significantly to its development.
- **The advantages and disadvantages of different routes:** The Global Framework on Chemicals and the Basel, Rotterdam, and Stockholm conventions, for example, have clear criteria and procedures for identifying new issues and taking them forward. Building on existing structures has many advantages, but in cases where cross-cutting issues may not fit cleanly with the criteria or within the mandate of one of the conventions, other routes to action may be necessary.

A majority of respondents to the global consultation called for leadership by ICCM (now superseded by the International Conference) for many of the issues of concern and underlined the relevance of the new Global Framework on Chemicals. This new framework clearly has the potential to make a significant contribution to action on these issues. However, in those cases where the aim is to secure a new legally binding agreement, it will be necessary for a body such as UNEA to establish an intergovernmental negotiating committee.

- **Costs and resource constraints:** Many countries, and particularly those with more limited resources, may face challenges in implementing new actions. The financial, institutional, and technical capacity required, including for monitoring and enforcement of chemical regulations, needs appropriate attention. Further collaboration, exchanges of knowledge and expertise, and new and additional sources of financial support may be needed to overcome

these constraints. An integrated approach that combines a range of strategies could be employed to address these constraints.

- **The need for new approaches:** As previously noted, many stakeholders stressed that new approaches are needed to effectively address the challenges posed by chemical pollution. Both UNEA and the International Conference may wish to consider broader, holistic ways of addressing chemicals. In doing so, they may wish to consider ensuring joined up approaches that link to other agendas and the specific needs of developing countries. A key aspect will be to pave the way for more structured engagement of all relevant actors throughout the entire lifecycle of chemicals and products to support the development and implementation of effective, efficient, and practical solutions. This includes from sectors involved in the manufacture and use of chemicals, the finance sector, and the informal sector, amongst others.

Conclusion

The global consultation indicated that many of the 19 issues of concern are of critical importance and require further international action to protect human health and the environment from exposure to hazardous substances. Stakeholders put forward a wealth of approaches for doing so, underscoring the need for multifaceted strategies that incorporate both legally binding and voluntary measures while accommodating diverse preferences for tools and mechanisms to achieve this goal. As emphasized by stakeholders, "better approaches" are needed and key principles including gender mainstreaming, holistic approaches, and inclusive engagement must be integrated into future actions to maximize their effectiveness.

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Appendix 1: Overview of the consultation process

The consultative process conducted in response to resolution 5/7 comprised information-sharing webinars, a call for written inputs, and a global consultation meeting. In support of this process, background documentation was developed, including factsheets on each of the 19 issues of concern and overviews of the issues clustered into three groups: metals and metalloids; chemicals in products; and bioactive chemicals. The draft report, along with its annex, was circulated for review by member states and other stakeholders who had participated in the consultation process.

Information-sharing webinars

UNEP organized webinars in April and June 2023 to provide an overview of the main findings of the Assessment Report and discuss how to address issues of concern. At the first webinar, the lead author of the Assessment Report presented the key findings and main conclusions of the report. The second webinar, organized in cooperation with the Geneva Environment Network, featured two panel discussions. The first focused on prioritizing issues of concern, looking at which issues are critical to address now, and the second focused on which issues of concern are most actionable. Speakers included representatives of UNEP, OECD, ILO, the BRS Secretariat, Member States, and civil society organizations. Both webinars elaborated on the process by which stakeholders could contribute their views (Geneva Environment Network 2023; UNEP 2023a)¹¹.

Call for written inputs

A call for written inputs, in the form of a survey, was launched in June 2023 to gather stakeholders' views on priorities for future work and potential international action on each of the 19 issues. The call for inputs was circulated to UNEP focal points for countries and UNEP accredited organizations, as well as to the focal points for SAICM and the Basel, Rotterdam, Stockholm, and Minamata conventions. Seventy-one responses were received by the extended deadline.

Stakeholders were invited to share their views and provide information on each of the issues of concern (with the option to 'pass' on any issues in which respondents either had no interest or no information to contribute). There were opportunities to provide free text comments covering: views on the case for further international action; the type of action (if any) which would be appropriate; examples of successful approaches; the sectors and potential agencies which might need to be involved; and the relative priority and actionability of each issue.

Global consultation meeting

A hybrid global consultation meeting was held in Geneva, Switzerland and online on 11 and 12 July 2023, with close to 200 participants from governments, IGOs, civil

¹¹ Recording of both events are available online.

society organizations, academia, and the private sector (UNEP 2023b). The meeting provided an opportunity for stakeholders to engage in an open exchange of views on the issues and to discuss cross-cutting aspects and linkages with other agendas. The meeting was informal, and the views expressed are not attributed to individual participants in this report.

Supporting documentation

UNEP developed factsheets on each of the 19 issues of concern (UNEP 2023c). These summarize information from the Assessment Report, including on the relevance of each issue, existing instruments and actions, and potential challenges and opportunities. UNEP also prepared overviews of the issues in three high level groups: metals and metalloids; chemical in products; and bioactive chemicals. These documents were made available as background information to the global consultation meeting (UNEP 2023d).

Additionally, UNEP prepared a “catalogue of actions” illustrating potential international responses to chemicals and waste issues, organized by type of action. It covered approaches based on legally binding instruments, soft law instruments, and information sharing, awareness raising and voluntary initiatives, and provided examples (UNEP 2023e).

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Appendix 2: Overview of responses to the call for written input

The present appendix provides an overview of responses to the call for written inputs received between June and August 2023. Further details on the views shared on each of the 19 issues of concern are presented in the annex to this report.

UNEP received 71 responses by 25 August 2023 (the extended deadline for written submissions). The respondents are listed in Table A1 below. Some of these responses were provided on behalf of groups of stakeholders – for example, there were responses from a Regional Economic Integration Organization and its member states, and from global trade/ industry associations and federations of civil society organizations representing a larger number of national entities/associations.

Table A1: Overview of Responding Entities

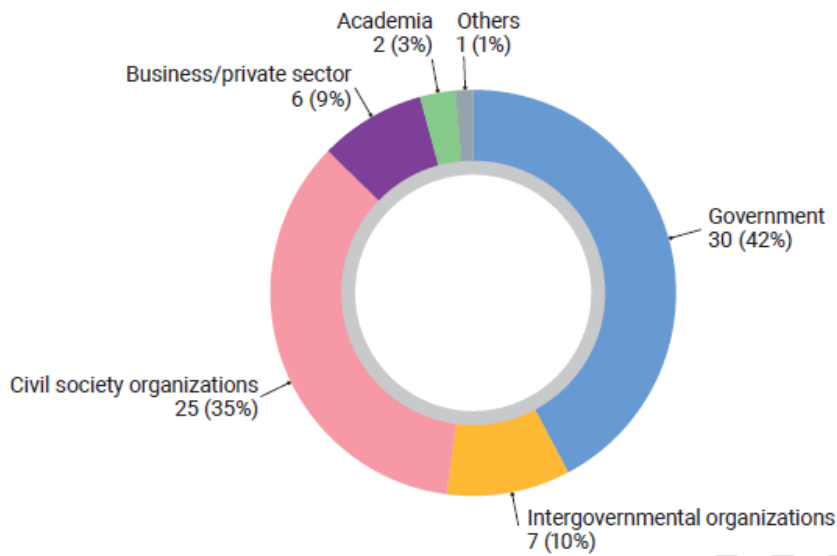
Institution/organisation			
Governments			
1	Argentina	16	Islamic Republic of Iran
2	Armenia	17	Japan
3	Belarus	18	Kenya
4	Bosnia and Herzegovina	19	Liberia
5	Brazil	20	Maldives
6	Canada	21	Mauritius
7	Chile	22	México
8	Colombia	23	Montenegro
9	Dominican Republic	24	Morocco
10	El Salvador	25	Panama
11	Ethiopia	26	Peru
12	European Union and its Member States	27	Serbia
13	Guinea	28	Sierra Leone
14	India	29	Switzerland
15	Iraq	30	United Arab Emirates
Intergovernmental Organizations			
31	Food and Agriculture Organization (FAO) and World Health Organization (WHO)		
32	International Labour Organization (ILO)		
33	International Telecommunication Union (ITU)		
34	International Union for Conservation of Nature (IUCN)		
35	Secretariat of the Basel, Rotterdam, and Stockholm conventions		
36	United Nations Institute for Training and Research (UNITAR)		
37	World Health Organization (WHO)		
Civil Society Organizations			
38	Action Group for Promotion and Protection of Fauna and Flora (GAPROFFA)		
39	Asociacion Colnodo		
40	Association Institute of Total Environment (INTEV)		
41	Break Free from Plastic - USA		
42	Centre for Human Rights and Climate Change Research (C4HR&CCR)		
43	Children's Environmental Health Foundation (CEHF Zambia)		
44	Comparatively for Tanzania Elites Community Organizers (CTECO)		
45	Federation of Environmental and Ecological Diversity for Agricultural Revampment and Human Rights		
46	Health Care Without Harm (HCWH)		

47	Health and Environment Justice Support (HEJSupport) and Swedish Society for Nature Conservation
48	International Council on Mining and Metals (ICMM)
49	International Movement for Advancement of Education Culture Social & Economic Development
50	International Trade Union Confederation (ITUC)
51	IPEN (International Pollutants Elimination Network)
52	International Society of Doctors for the Environment (ISDE)
53	Marine ecosystems Protected Areas (MEPA) Trust
54	Nexus3 Foundation
55	No More Butts
56	ONG-ASHAD
57	Pesticide Action Network International (PAN International)
58	Pure Earth
59	Royal Society of Chemistry
60	Sadayanodai Ilaignar Narpani Mandram (SINAM)
61	Shenzhen Zero Waste
62	Welfare Togo
Business/ private	
63	Algerian Consulting Group
64	American Chemistry Council (ACC)
65	CropLife International
66	Plastics Europe
67	The International Council of Chemical Associations (ICCA)
68	VinylPlus
Academia	
69	San Diego State University School of Public Health
70	Tehran university of medical sciences
Other	
71	Greece - Independent Authority for Public Revenue (IAPR)

All submissions received are available on the UNEP website (UNEP 2023f). A small number were received after the extended deadline and hence could not be reflected in this report; they are, however, available on the website.

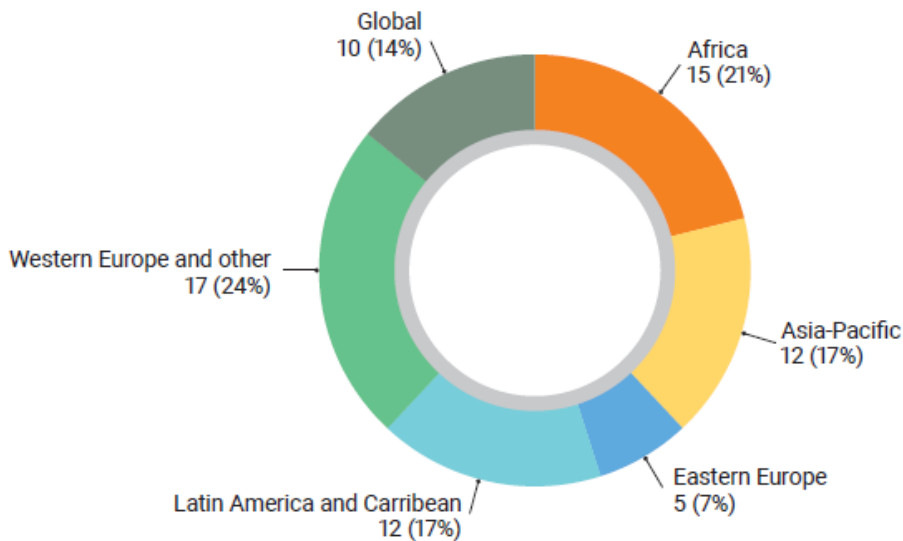
Figure A1 (below) shows the organizational status of the respondents. As highlighted in Figure A2, respondents represented all UN regions. Specifically, submissions were received both from Member States from all regions and from other stakeholders from all regions.

Figure A1: Stakeholders who submitted written inputs by type of institution



Note: Number of respondents (n) = 71

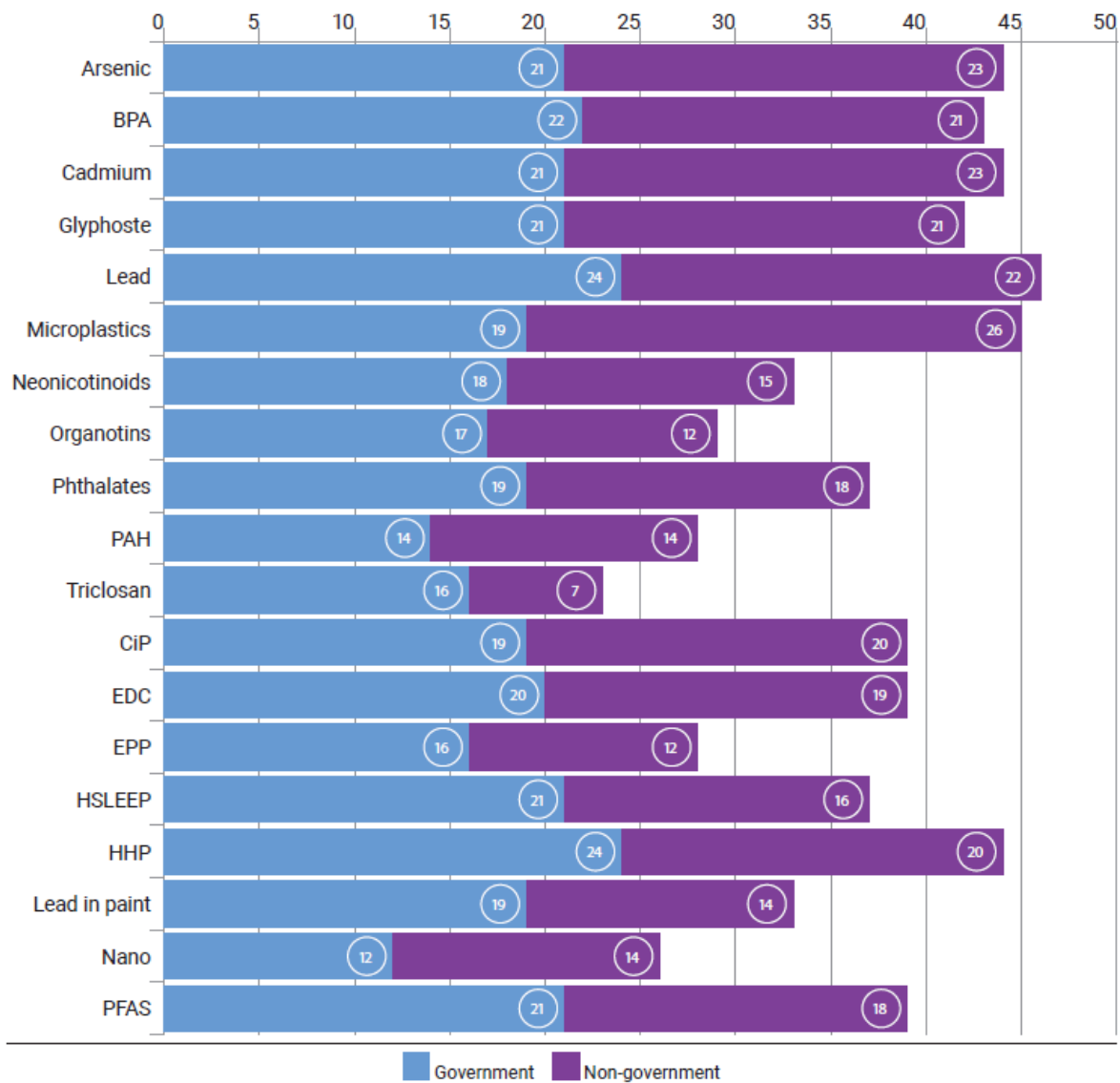
Figure A2: Stakeholders who submitted written inputs by region



Note: Number of respondents (n) = 71

It should be noted that not all respondents addressed each of the 19 issues, and many answered the tick box questions but did not provide additional comments in the text boxes. Figure A3 shows the number of respondents who answered at least one substantive question regarding an issue of concern. Lead received the most attention from respondents, followed closely by microplastics, and then arsenic, cadmium, and highly hazardous pesticides.

Figure A3: Number of Member States and other Stakeholders who answered at least one substantive question for each issue of concern



Note: Issues of concern are arranged in the order of their appearance in the call for written inputs. Number of respondents = 68. Three other stakeholders submitted contributions: one answered only non-substantive questions, and two submitted general comments but did not respond to the individual substantive questions. Thus, a total of seventy-one stakeholders responded to the call for written inputs, but only 68 answered at least one substantive question from the survey.

Appendices References

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