

UNEP's Call for Written Inputs on Issues of Concern: Priorities for further work and potential further international action

Introduction

UNEP is undertaking a consultation on priorities for further work and potential further international action on 19 Issues of concern. This call for written inputs is being conducted to gather relevant information from stakeholders and views about the next steps that should be taken on issues of concern.

The call for inputs will address 19 issues of concern and you may wish to only provide answers for issues of concern that are of relevance to your organization/ country. At the start of each section, you will be asked whether you would like to provide responses on each specific issue. If you choose "No" on the introduction page of each issue you may proceed to the next issue of concern.

Please be aware that the submitted responses will be made available on the UNEP website indicating the stakeholder affiliation/ government. The names and contact details of the respondents will not be published on the UNEP website. Further information on UNEPs consultation process can be [found here](#).

We highly recommend coordinating responses within your stakeholder affiliation/ government. Please complete this form for collecting written inputs by **15/08/2023** COB Central European time (CET).

For those using this MS word version, kindly return the completed word version of the call for written inputs. Please remember to save your work often, due to the addition of ActiveX controls below (such as option buttons and checkboxes), the autosave feature is not available on this form.

Please enter your email details.

Email:

Background

In 2020, UNEP developed an [Assessment Report on Issues of Concern](#), to inform the international community about the current situation of specific chemicals and waste issues. It was based on a review of published evidence. It was intended to support discussion at the fifth session of the UN Environment Assembly (UNEA 5) and other international forums working towards sound management of chemicals and waste. The Assessment Report assessed the ability of existing actions to address current environmental and human exposure to individual chemicals and groups of chemicals. It looked at 11 issues with emerging evidence of risks identified by the Global Chemicals Outlook-II and the 6 Emerging Policy Issues (EPIs) and two other Issues of Concern identified under the Strategic Approach to International Chemicals Management (SAICM). The report concluded that concerted international action by all stakeholders at all levels is urgently required.

GCO-II issues	SAICM Issues
1) Arsenic	1) Chemicals in products (CiP)
2) Bisphenol A (BPA)	2) Endocrine-disrupting chemicals (EDCs)
3) Cadmium	3) Environmentally Persistent Pharmaceutical Pollutants (EPPPs)
4) Glyphosate	4) Hazardous substances within the life cycle of electrical and electronic products (HSLEEP)
5) Lead	5) Highly hazardous pesticides (HHPs)
6) Microplastics	6) Lead in paint
7) Neonicotinoids	7) Nanotechnology and manufactured nanomaterials
8) Organotins	8) Per- and polyfluoroalkyl substances (PFASs) and the transition to safer alternatives
9) Phthalates	
10) Polycyclic Aromatic Hydrocarbons (PAHs)	
11) Triclosan	

In March 2022, at UNEA 5.2, UNEP was requested through [resolution 5/7](#) 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 issues discussed in the Assessment Report on Issues of Concern. The resolution also requests the preparation of a summary analysis, taking into account the views received.

Through this call for inputs, UNEP intends to respond to UNEA's request by gathering information from stakeholders about the priorities for future work and potential further international action. The findings from this call for written inputs will inform the writing of the Summary Analysis. The Summary Analysis is expected to build upon the [SAICM Survey](#) which considered the 8 EPIs and other issues of concern.

Available resources to support your responses:

All 19 issues of concern will be covered in this call for written inputs. A recording from an information webinar held on 27 April 2023, on the Assessment Report on Issues of Concern is [available here](#) for your reference. Further background information can be found below:

- Assessment report [here>>](#)
- Annexes [here>>](#)
- Factsheets on Issues of concern [here>>](#)
- Catalogue of International Actions on Chemicals and Waste [here>>](#)
- Survey from SAICM Sec on EPIs [here>>](#)

The form for submitting written inputs will remain open until **15/08/2023** COB Central European time (CET).

Thank you for your kind support with this consultation.



Personal Information:

Institution/Organization: GENERAL DIRECTORATE OF THE GENERAL CHEMICAL STATE LABORATORY

Type of Institution: *(Government| Intergovernmental Organization| Civil Society Organization| Business/Private Sector| Academia| Other)*

INDEPENDENT AUTHORITY FOR PUBLIC REVENUE (IAPR)

If relevant, please describe the membership coverage, geographical coverage and area of interest of your institution:

Country: GREECE

Questions

1. Arsenic

Screening Question - Arsenic

Arsenic is a naturally occurring metalloid that is ubiquitous in the Earth's crust. It is present in various inorganic and organic forms. Arsenic and arsenic compounds are used intentionally in wood preservatives, pesticides, animal feed additives, pharmaceuticals, glass production, alloy manufacturing, electronics, and semiconductor manufacturing.

Please visit the two-page factsheet on [Arsenic](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, e.g. Bisphenol A (BPA))*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Technical Questions - Arsenic

Arsenic is a naturally occurring metalloid that is ubiquitous in the Earth's crust. It is present in various inorganic and organic forms. Arsenic and arsenic compounds are used intentionally in wood preservatives, pesticides, animal feed additives, pharmaceuticals, glass production, alloy manufacturing, electronics, and semiconductor manufacturing.

Please visit the two-page factsheet on [Arsenic](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
- No
- Do not know

- a. Please provide a brief explanation for your response*. "The public health priority is to reduce exposure of people to contaminated water and food with arsenic. Long-term

exposure to arsenic from drinking-water and food can cause, among other health side-effects, cancer and skin lesions.”

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions prepared by UNEP for more information on available options](#)).*

- Legally binding*
- Soft law*
- Information sharing and awareness/ Voluntary initiatives*
- No international actions are needed*
- Other: _____.*

a. Please explain your response, including examples if possible*. “Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation.”

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions prepared by UNEP for more information on available options](#)).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity
- Lack of scientific knowledge
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors
- Difficulty with resource mobilisation
- Lack of economically feasible green and sustainable alternatives
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?
- None, there are no factors preventing action or progress
- Other: _____

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects
- REACH: Regulatory framework-restrictions-authorizations

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Arsenic](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production
- Construction
- Electronics
- Energy
- Health
- Labour
- Pharmaceuticals
- Public, private, blended finance
- Retail
- Textiles
- Transportation
- Waste
- Other: Mining, metallurgical, glass-making and semiconductor industries

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

- a. Which international agendas have important linkages with this issue of concern?
(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):

- Agriculture and Food*
- Biodiversity*
- Climate Change*
- Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

- b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)*):

High levels of Arsenic in ground water poses a risk in agricultural sustainability and food safety. Consumption of drinking water high in arsenic leads to human health risks. Water and climate change are inextricably linked, as rising temperatures disrupt precipitation patterns and the entire water cycle. The decrease in water level increases the arsenic-rich bed oxidation and mobilization.

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available*).

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available*).

“Data based risk assessment to justify regulatory measures”

2. Bisphenol A (BPA)

Screening Question - Bisphenol A (BPA)

Bisphenols are a group of dozens of organic compounds that have been used as building blocks in the production of polycarbonate plastics, epoxy resins and other products since the 1960s. The variety of products include water bottles, sports equipment, medical devices, household electronics, thermal paper receipts, and food and beverage cans.

Among the bisphenols, bisphenol A (BPA) has attracted the most attention. The consumption of BPA and related products is widespread and estimated to continue to grow in the foreseeable future, driven mainly by increasing demand for polycarbonates and other plastics.

Please visit the two-page factsheet on [Bisphenol-A](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Cadmium)*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Technical Questions - Bisphenol A (BPA)

Bisphenols are a group of dozens of organic compounds that have been used as building blocks in the production of polycarbonate plastics, epoxy resins and other products since the 1960s. The variety of products include water bottles, sports equipment, medical devices, household electronics, thermal paper receipts, and food and beverage cans.

Among the bisphenols, bisphenol A (BPA) has attracted the most attention. The consumption of BPA and related products is widespread and estimated to continue to grow in the foreseeable future, driven mainly by increasing demand for polycarbonates and other plastics.

Please visit the two-page factsheet on [Bisphenol-A](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
- No
- Do not know

a. Please provide a brief explanation for your response*. "Exposure to BPA is a concern because of the possible health effects on the brain and prostate gland of fetuses, infants and children. Also, there is a possible link between BPA and increased blood pressure, type 2 diabetes and cardiovascular disease."

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions prepared by UNEP for more information on available options](#)).*

- Legally binding
- Soft law
- Information sharing and awareness/ Voluntary initiatives
- No international actions are needed
- Other: _____.

a. Please explain your response, including examples if possible*. "Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information

sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation.”

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions prepared by UNEP for more information on available options](#)).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects
- REACH: Regulatory framework-restrictions-authorizations
- Already exists regulatory measure i.e. REACH and/or CLP in EU level: restriction-authorization-new hazard class

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Bisphenol A](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production*
- Construction*
- Electronics*
- Energy*
- Health*
- Labour*
- Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- Textiles*
- Transportation*
- Waste*
- Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

- Agriculture and Food*
- Biodiversity*
- Climate Change*
- Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

b. Please explain your response, including examples if possible. *(Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):* " BPA is abundant in the environment and is incorporated into soil/water through leaching. BPA is a potent endocrine disrupter and has the potential to alter several body mechanisms. Also, it reduces thermal tolerance in fish."

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Data based risk assessment to justify regulatory measures”

3. Cadmium

Screening Question - Cadmium

Cadmium is a toxic metal that is naturally found in the Earth's crust, generally at low levels. Cadmium and cadmium compounds are mainly used in nickel-cadmium batteries, alloys, coatings and plating, pigments in plastics, glasses, ceramics and paints, solar cells, PVC stabilisers and others. It has been produced, used and released in large quantities, and thus intentional human uses have caused widespread, persistent contamination and exposure.

Please visit the two-page factsheet on [Cadmium](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Glyphosate)*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Technical Questions - Cadmium

Cadmium is a toxic metal that is naturally found in the Earth's crust, generally at low levels. Cadmium and cadmium compounds are mainly used in nickel-cadmium batteries, alloys, coatings and plating, pigments in plastics, glasses, ceramics and paints, solar cells, PVC stabilisers and others. It has been produced, used and released in large quantities, and thus intentional human uses have caused widespread, persistent contamination and exposure.

Please visit the two-page factsheet on [Cadmium](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
 No
 Do not know

- a. Please provide a brief explanation for your response*. "Cadmium is considered a cancer-causing agent"

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Legally binding
 Soft law
 Information sharing and awareness/ Voluntary initiatives
 No international actions are needed
 Other: _____.

- a. Please explain your response, including examples if possible*. "Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation."

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects
- REACH: Regulatory framework-restrictions-authorizations
- Already exists regulatory measure i.e. REACH and/or CLP in EU level: restriction-authorization-new hazard class

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Cadmium](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production*

- ✓ *Construction*
- ✓ *Electronics*
- Energy*
- ✓ *Health*
- Labour*
- Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- Textiles*
- Transportation*
- ✓ *Waste*
- Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? (*Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...*).

UNEP, SAICM or “New Instrument”

a. Which international agendas have important linkages with this issue of concern? (*Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)*):

- ✓ *Agriculture and Food*
- ✓ *Biodiversity*
- ✓ *Climate Change*
- ✓ *Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)*): From the soil certain plants (tobacco, rice, other cereal grains, potatoes and other vegetables) take up cadmium more avidly than they do other heavy metals. Cadmium is also found in meat (liver, kidney). Cadmium causes mutations and chromosomal deletions potentially. The global climate change has potential effect on the absorbance of various contaminants like cadmium. Also, breathing high levels of cadmium damages people’s lungs and can cause death. Exposure to low levels of cadmium in air, food, water, and particularly in tobacco smoke over time may build up cadmium in the kidneys and cause kidney disease and fragile bones. Cadmium is considered a cancer-causing agent.”

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Data based risk assessment to justify regulatory measures”

4. Glyphosate

Screening Question - Glyphosate

Glyphosate is an organophosphorus herbicide for agricultural, forestry and residential weed control that kills or suppresses all plant types, with the exception of those genetically modified to be tolerant to it. Since its introduction in 1974, glyphosate has become the most widely used herbicide worldwide. The largest use of glyphosate has been in agriculture; however, glyphosate use in urban settings can also be a significant source of contamination.

Please visit the two-page factsheet on [Glyphosate](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Lead)*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Technical Questions - Glyphosate

Glyphosate is an organophosphorus herbicide for agricultural, forestry and residential weed control that kills or suppresses all plant types, with the exception of those genetically modified to be tolerant to it. Since its introduction in 1974, glyphosate has become the most widely used herbicide worldwide. The largest use of glyphosate has been in agriculture; however, glyphosate use in urban settings can also be a significant source of contamination.

Please visit the two-page factsheet on [Glyphosate](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
 No
 Do not know

a. Please provide a brief explanation for your response*. _____

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Legally binding
 Soft law
 Information sharing and awareness/ Voluntary initiatives
 No international actions are needed
 Other: _____.

a. Please explain your response, including examples if possible*. "Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation."

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects
- REACH: Regulatory framework-restrictions-authorizations
- Biocidal Product Regulation Regulatory framework
- Already exists regulatory measure i.e. REACH and/or CLP in EU level: restriction-authorization-new hazard class

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Glyphosate](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production*
- Construction*
- Electronics*
- Energy*
- Health*
- Labour*
- Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- Textiles*
- Transportation*
- Waste*
- Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? (*Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...*).

UNEP, SAICM or “New Instrument”

a. Which international agendas have important linkages with this issue of concern? (*Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)*):

- Agriculture and Food*
- Biodiversity*
- Climate Change*
- Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)*): “Glyphosate is a herbicide. It is applied to the leaves of plants to kill both broadleaf plants and grasses. It has negative impacts on bees, soil health, aquatic life and biodiversity in general. In addition it has serious adverse effects in humans, as it is easily absorbed by kidneys and liver, mainly being suspected of causing cancer.

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Data based risk assessment to justify regulatory measures”

5. Lead

Screening Question - Lead

Lead is a toxic metal that occurs naturally in the Earth's crust. It may exist in both inorganic and organic forms. The current global uses of lead are in batteries, rolled and extruded products, pigments and other product additives (e.g. for paints, cathode ray tubes, enamels and ceramics, PVC stabilisers), ammunition, alloys, cable sheathing and other uses

Please visit the two-page factsheet on [Lead](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Microplastics)*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Technical Questions - Lead

Lead is a toxic metal that occurs naturally in the Earth's crust. It may exist in both inorganic and organic forms. The current global uses of lead are in batteries, rolled and extruded products, pigments and other product additives (e.g. for paints, cathode ray tubes, enamels and ceramics, PVC stabilisers), ammunition, alloys, cable sheathing and other uses

Please visit the two-page factsheet on [Lead](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
- No
- Do not know

a. Please provide a brief explanation for your response*. "Lead is a cumulative toxicant that affects multiple body systems and in particular harmful to young children. There is no level of exposure to lead that is known to be without harmful effects. Furthermore, lead exposure is preventable."

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Legally binding
- Soft law
- Information sharing and awareness/ Voluntary initiatives
- No international actions are needed
- Other: _____.

a. Please explain your response, including examples if possible*. "Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation."

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*
- Regulatory control measures*
 - Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
 - Options / guidance for economic instruments*
 - Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
 - Measures supporting science-based knowledge and research*
 - Other: _____*
- a. Please explain your response, including examples if possible: _____
4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*
- Lack of technical capacity*
 - Lack of scientific knowledge*
 - Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
 - Difficulty with resource mobilisation*
 - Lack of economically feasible green and sustainable alternatives*
 - Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
 - None, there are no factors preventing action or progress*
 - Other: _____*
- a. Please explain your response, including examples if possible: _____
5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*
- Academia and industry joint research projects
 - REACH: Regulatory framework-restrictions-authorizations
 - Already exists regulatory measure i.e. REACH and/or CLP in EU level: restriction-authorization-new hazard class
6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Lead](#) for more information on the topic. If you select "Other", please elaborate your response).*

- ✓ *Agriculture and food production*
- ✓ *Construction*
- Electronics*
- ✓ *Energy*
- ✓ *Health*
- Labour*
- Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- Textiles*
- Transportation*
- ✓ *Waste*
- Other: Cosmetics*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? (*Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...*).

UNEP, SAICM or “New Instrument”

- a. Which international agendas have important linkages with this issue of concern? (*Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)*):

- ✓ *Agriculture and Food*
- ✓ *Biodiversity*
- ✓ *Climate Change*
- ✓ *Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

- b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)*): “Lead is naturally present in all soils. Pollution can increase soil lead levels to several thousand ppm. Lead has no biological purpose in plants, although it can create morphological, physiological, and biochemical problems. Ecosystems near point sources of lead demonstrate a wide range of adverse effects including losses in biodiversity, changes in community composition, decreased growth and reproductive rates in plants and animals, and neurological effects in vertebrates. Also, young children are particularly vulnerable to the toxic effect of lead and can suffer profound and permanent adverse health impacts, particularly on the development of

the brain and nervous system. Lead also causes long-term harm in adults, including increased risk of high blood pressure and kidney damage.”

8. What priority level do you attach to this issue for international action?

Very high

High

Medium

Low

Very low

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Data based risk assessment to justify regulatory measures”

6. Microplastics

Screening Question - Microplastics

Microplastics are solid particles made of synthetic polymers, typically defined as smaller than 5 mm. Microplastics have been intentionally added to a wide range of products and application areas for diverse technical functions. For example, they are added in cosmetics and personal care products, detergents and maintenance products, agriculture and horticulture, medical devices and in vitro diagnostic medical devices, medicinal products for human and veterinary use, food supplements, paints, coatings and inks, oil and gas drilling and production, plastics, technical ceramics, media for abrasive blasting, adhesives, 3D printing materials and printing inks.

Please visit the two-page factsheet on [Microplastics](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Neonicotinoids)*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Technical Questions - Microplastics

Microplastics are solid particles made of synthetic polymers, typically defined as smaller than 5 mm. Microplastics have been intentionally added to a wide range of products and application areas for diverse technical functions. For example, they are added in cosmetics and personal care products, detergents and maintenance products, agriculture and horticulture, medical devices and in vitro diagnostic medical devices, medicinal products for human and veterinary use, food supplements, paints, coatings and inks, oil and gas drilling and production, plastics, technical ceramics, media for abrasive blasting, adhesives, 3D printing materials and printing inks.

Please visit the two-page factsheet on [Microplastics](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
- No
- Do not know

a. Please provide a brief explanation for your response*. "Microplastics can cause various diseases of the endocrine system and reproductive system."

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Legally binding
- Soft law
- Information sharing and awareness/ Voluntary initiatives
- No international actions are needed
- Other: Thorough investigation: The hazard attributed to microplastics is more related to their fine size than to their chemical structure, thus consisting a new hazard type requiring further investigation.

a. Please explain your response, including examples if possible*." Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information

sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation.”

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions prepared by UNEP for more information on available options](#)).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects
- REACH: Regulatory framework-restrictions-authorizations
- Already exists regulatory measure i.e. REACH and/or CLP in EU level: restriction-authorization-new hazard class

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Microplastics](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production*
- Construction*
- Electronics*
- Energy*
- Health*
- Labour*
- Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- Textiles*
- Transportation*
- Waste*
- Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

- Agriculture and Food*
- Biodiversity*
- Climate Change*
- Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

b. Please explain your response, including examples if possible. *(Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

"Microplastic particles and fibres are widely distributed pollutant in the food and agriculture systems, as well as in the pharmaceutical industry. They are toxic to plants and animal life. They represent a potential threat to the conservation of biodiversity and

ecosystem function. Microplastics can cause cancer and change hormone activity which can lead to reproductive, growth, and cognitive impairment.”

8. What priority level do you attach to this issue for international action?

Very high

High

Medium

Low

Very low

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Data based risk assessment to justify regulatory measures”

7. Neonicotinoids

Screening Question - Neonicotinoids

Neonicotinoids are a class of neuroactive insecticides chemically related to nicotine. Since the first neonicotinoid (imidacloprid) was commercialized in the 1990s, seven main compounds (acetamiprid, clothianidin, dinotefuran, imidacloprid, nitenpyram, thiamethoxam and thiacloprid) are now available on the global market. Today, neonicotinoids are used in protecting plants, livestock and pets from pest insects, as well as for malaria vector control, i.e., mosquitos, to protect humans, in more than 100 countries. Neonicotinoids are also used as biocides.

Please visit the two-page factsheet on [Neonicotinoids](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Organotins)*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Technical Questions - Neonicotinoids

Neonicotinoids are a class of neuroactive insecticides chemically related to nicotine. Since the first neonicotinoid (imidacloprid) was commercialized in the 1990s, seven main compounds (acetamiprid, clothianidin, dinotefuran, imidacloprid, nitenpyram, thiamethoxam and thiacloprid) are now available on the global market. Today, neonicotinoids are used in protecting plants, livestock and pets from pest insects, as well as for malaria vector control, i.e., mosquitos, to protect humans, in more than 100 countries. Neonicotinoids are also used as biocides.

Please visit the two-page factsheet on [Neonicotinoids](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
- No
- Do not know

a. Please provide a brief explanation for your response*. "Neonicotinoids were distributed extensively in the environment and occurred frequently in humans. Their potential health effects such as neurological toxicity and diabetes to non-targeted mammals, have raised concerns"

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions prepared by UNEP for more information on available options](#)).*

- Legally binding
- Soft law
- Information sharing and awareness/ Voluntary initiatives
- No international actions are needed
- Other: _____.

a. Please explain your response, including examples if possible*. "Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information

sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation.”

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions prepared by UNEP for more information on available options](#)).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects
- Biocidal Product Regulation Regulatory framework

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Neonicotinoids](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production*
- Construction*
- Electronics*
- Energy*
- Health*
- Labour*
- Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- Textiles*
- Transportation*
- Waste*
- Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

- Agriculture and Food*
- Biodiversity*
- Climate Change*
- Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

b. Please explain your response, including examples if possible. *(Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

"Neonicotinoids are used as insecticides on a wide variety of crops, turf, ornamentals, pets (for flea treatment) and other residential and commercial indoor and outdoor uses.

They can persist in soil for months or years after a single application. Although less acutely toxic to mammals and other vertebrates than older insecticides, neonicotinoids are highly toxic in small quantities to bees and the risk increases with climate change.”

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Data based risk assessment to justify regulatory measures”

8. Organotins

Screening Question - Organotins

Organotins are organic compounds that contain at least one tin-carbon bond. There are four main groups of organotin compounds, which are used in various applications. Mono- and di-organotins are mainly used as heat stabilisers in polyvinyl chloride (PVC) in a wide range of applications, including window frames and house siding, PVC pipes, food contact blister packs and water bottles. Tri-organotins are mainly used as biocides (e.g. in wood preservatives, in anti-fouling paints for boats and in textiles) and as pesticides. Tetra-organotins have been used as intermediates in the preparation of other organotins and as oil stabilisers.

Please visit the two-page factsheet on [Organotins](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Phthalates)*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Organotins are organic compounds that contain at least one tin-carbon bond. There are four main groups of organotin compounds, which are used in various applications. Mono- and di-organotins are mainly used as heat stabilisers in polyvinyl chloride (PVC) in a wide range of applications, including window frames and house siding, PVC pipes, food contact blister packs and water bottles. Tri-organotins are mainly used as biocides (e.g. in wood preservatives, in anti-fouling paints for boats and in textiles) and as pesticides. Tetra-organotins have been used as intermediates in the preparation of other organotins and as oil stabilisers.

Please visit the two-page factsheet on [Organotins](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
- No
- Do not know

a. Please provide a brief explanation for your response*. "Concerns are growing with organotins because of their widespread use in PVC (vinyl) and other plastics resulting in ongoing human exposure. Some are known hormone disruptors that may threaten human health."

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions prepared by UNEP for more information on available options](#)).*

- Legally binding
- Soft law
- Information sharing and awareness/ Voluntary initiatives
- No international actions are needed
- Other: _____.

a. Please explain your response, including examples if possible*. "Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information

sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation.”

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions prepared by UNEP for more information on available options](#)).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects
- REACH: Regulatory framework-restrictions-authorizations

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Organotins](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production*
- Construction*
- Electronics*
- Energy*
- Health*
- Labour*
- Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- Textiles*
- Transportation*
- Waste*
- Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

- Agriculture and Food*
- Biodiversity*
- Climate Change*
- Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

b. Please explain your response, including examples if possible. *(Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):* "Organotin compounds in low doses have toxic effects. These components may also contaminate food. Toxicity of organotins in humans is most frequently reported as loss of memory and insomnia as well as other symptoms including death. The primary source of human exposure to organotin compounds is seafood. Also, organotins are commercially important agricultural fungicides and

insecticides. Other uses of organotin are as slimicides in industrial water systems, as wood preservatives and as marine antifouling agents.”

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Data based risk assessment to justify regulatory measures”

9. Phthalates

Screening Question - Phthalates

Phthalates are a large family of semi-volatile organic compounds. They are a group of plasticizers with softening and elastic effects, and they are produced in high volumes to be used in products such as vinyl flooring, adhesives, detergents, lubricating oils, automotive plastics, plastic clothing and personal care products. Phthalates accounted for 65 per cent of global consumption of plasticizers in 2017.

Please visit the two-page factsheet on [Phthalates](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Polycyclic Aromatic Hydrocarbons (PAHs))*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Phthalates are a large family of semi-volatile organic compounds. They are a group of plasticizers with softening and elastic effects, and they are produced in high volumes to be used in products such as vinyl flooring, adhesives, detergents, lubricating oils, automotive plastics, plastic clothing and personal care products. Phthalates accounted for 65 per cent of global consumption of plasticizers in 2017.

Please visit the two-page factsheet on [Phthalates](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
 No
 Do not know

- a. Please provide a brief explanation for your response*. "Phthalates are a group of chemicals used to make plastics more durable. Due to the ubiquity of plasticized plastics the majority of people are exposed to some level of phthalates."

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Legally binding
 Soft law
 Information sharing and awareness/ Voluntary initiatives
 No international actions are needed
 Other: _____.

- a. Please explain your response, including examples if possible*. "Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation."

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects
- REACH: Regulatory framework-restrictions-authorizations
- Already exists regulatory measure i.e. REACH and/or CLP in EU level: restriction-authorization-new hazard class

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Phthalates](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production*
- Construction*
- Electronics*
- Energy*
- Health*
- Labour*
- Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- Textiles*
- Transportation*
- Waste*
- Other: Automotive manufacturing, Cosmetics, Personal Care Products*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

- Agriculture and Food*
- Biodiversity*
- Climate Change*
- Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

b. Please explain your response, including examples if possible. *(Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):* "Phthalates are in hundreds of products and they are often toxic. They are harmful to humans and ecosystems. Even at low levels, bisphenols and phthalates can mimic or block hormones, disrupting vital body systems and the reproduction in humans and wildlife."

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Data based risk assessment to justify regulatory measures”

10. Polycyclic Aromatic Hydrocarbons (PAHs)

Screening Question - Polycyclic Aromatic Hydrocarbons (PAHs)

Polycyclic aromatic hydrocarbons (PAHs) are a class of more than 100 organic compounds. They occur naturally in coal and crude oil, but are also formed as a by-product during the incomplete combustion from both natural (e.g. volcanic eruptions, burning of coal, oil and gas) or anthropogenic (e.g. vehicle emissions, industrial processes, food preparation) sources. PAHs may also be present in consumer products (e.g. plastic components, footwear); however, they are never intentionally added during manufacturing. Plant-based foods may contain PAHs as a result of pollutant deposition before harvest.

Please visit the two-page factsheet on [Polycyclic Aromatic Hydrocarbons](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Triclosan)*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Technical Questions - Polycyclic Aromatic Hydrocarbons (PAHs)

Polycyclic aromatic hydrocarbons (PAHs) are a class of more than 100 organic compounds. They occur naturally in coal and crude oil, but are also formed as a by-product during the incomplete combustion from both natural (e.g. volcanic eruptions, burning of coal, oil and gas) or anthropogenic (e.g. vehicle emissions, industrial processes, food preparation) sources. PAHs may also be present in consumer products (e.g. plastic components, footwear); however, they are never intentionally added during manufacturing. Plant-based foods may contain PAHs as a result of pollutant deposition before harvest.

Please visit the two-page factsheet on [Polycyclic Aromatic Hydrocarbons](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
 No
 Do not know

- a. Please provide a brief explanation for your response*. "Cancer is a primary human health risk of exposure to PAHs. Exposure to PAHs has also been linked with cardiovascular disease and poor fetal development."

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions prepared by UNEP for more information on available options](#)).*

- Legally binding
 Soft law
 Information sharing and awareness/ Voluntary initiatives
 No international actions are needed
 Other: _____.

- a. Please explain your response, including examples if possible*. "Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information

sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation.”

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions prepared by UNEP for more information on available options](#)).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

SAICM or “New Instrument”

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Polycyclic Aromatic Hydrocarbons](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production*
- Construction*
- Electronics*
- Energy*
- Health*
- Labour*
- Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- Textiles*
- Transportation*
- Waste*
- Other: Industries that produce or use coal tar, coke, or bitumen (asphalt)*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

- Agriculture and Food*
- Biodiversity*
- Climate Change*
- Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

b. Please explain your response, including examples if possible. *(Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

"Food consumption and the environment are significant routes of exposure to PAHs. They are widely distributed environmental contaminants that have detrimental biological effects. Toxicity, mutagenicity and carcinogenicity. PAHs are very toxic and highly persistent environmental pollutants which accumulate in soil and affect growth of the plants adversely."

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Data based risk assessment to justify regulatory measures”

11. Triclosan

Screening Question - Triclosan

Triclosan is a synthetic, broad-spectrum antibacterial chemical used as an additive in thousands of consumer and medical antibacterial products and plastics. It has been used commercially across the globe since the 1970s. Major global use is in cosmetics and personal care products (68%, particularly deodorants) followed by disinfection and medical use (16%) and lower amounts in paints (8%), and in plastic materials, toys and appliances (8%).

Please visit the two-page factsheet on [Triclosan](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Chemicals in Products (CIP))*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Triclosan is a synthetic, broad-spectrum antibacterial chemical used as an additive in thousands of consumer and medical antibacterial products and plastics. It has been used commercially across the globe since the 1970s. Major global use is in cosmetics and personal care products (68%, particularly deodorants) followed by disinfection and medical use (16%) and lower amounts in paints (8%), and in plastic materials, toys and appliances (8%).

Please visit the two-page factsheet on [Triclosan](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
 No
 Do not know

- a. Please provide a brief explanation for your response*. "In animal models many lines of evidence have suggested that Triclosan has adverse effects on endocrine function, thyroid hormone, homeostasis, and antibiotic resistance."

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Legally binding
 Soft law
 Information sharing and awareness/ Voluntary initiatives
 No international actions are needed
 Other: _____.

- a. Please explain your response, including examples if possible*. "Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation."

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects
- REACH: Regulatory framework-restrictions-authorizations

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Triclosan](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production*
- Construction*
- Electronics*
- Energy*
- Health*
- Labour*
- Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- Textiles*
- Transportation*
- Waste*
- Other: Personal care products, cosmetics, household cleaning products, plastic materials, toys, paints.*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

- Agriculture and Food*
- Biodiversity*
- Climate Change*
- Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

b. Please explain your response, including examples if possible. *(Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):* "Triclosan is an endocrine disrupting chemical, it can harm the human endocrine system, leading to hormonal function issues. In recent years a number of studies show that triclosan is frequently present in plant species, including vegetables and agricultural crops irrigated with treated wastewater/grown in soil, such as pumpkin, carrot, radish, lettuce, cucumber, pepper, cabbage, and soybean plants"

8. What priority level do you attach to this issue for international action?

Very high

High

Medium

Low

Very low

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Data based risk assessment to justify regulatory measures”

12. Chemicals in products (CiP)

Screening Question - Chemicals in products (CiP)

Chemicals may be released at any stage of a product's life cycle (including production, use, recycling or reuse, end-of-life disposal), resulting in potential exposures for humans and the environment. Information exchange in the value chain is fundamental for manufacturers, brands, retailers, end-consumers, waste managers and regulators in identifying and soundly managing any chemicals of technical, environmental or human health concerns in products.

CiP was identified as an issue of concern under SAICM at ICCM2 in 2009, "with a view of taking appropriate cooperative actions, to consider the need to improve the availability of and access to information on chemicals in products in the supply chain and throughout their life cycle". SAICM stakeholders also identified four priority sectors: textiles, toys, building products and electronics.

Please visit the two-page factsheet on [Chemicals in Products](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Endocrine-disrupting chemicals (EDCs))*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Chemicals may be released at any stage of a product's life cycle (including production, use, recycling or reuse, end-of-life disposal), resulting in potential exposures for humans and the environment. Information exchange in the value chain is fundamental for manufacturers, brands, retailers, end-consumers, waste managers and regulators in identifying and soundly managing any chemicals of technical, environmental or human health concerns in products.

CiP was identified as an issue of concern under SAICM at ICCM2 in 2009, "with a view of taking appropriate cooperative actions, to consider the need to improve the availability of and access to information on chemicals in products in the supply chain and throughout their life cycle". SAICM stakeholders also identified four priority sectors: textiles, toys, building products and electronics.

Please visit the two-page factsheet on [Chemicals in Products](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
 No
 Do not know

- a. Please provide a brief explanation for your response*. "CIP are found in consumer products all over the world, resulting in the potential exposure of workers during manufacture, of consumers during use, of informal sectors involved in recycling and disposal with emphasis on women and children and of the environment."

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Legally binding
 Soft law
 Information sharing and awareness/ Voluntary initiatives
 No international actions are needed
 Other: _____.

- a. Please explain your response, including examples if possible*. "Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders,

in the absence of binding legal norms, it can be easily combined with information sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation.”

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects
- REACH: Regulatory framework-restrictions-authorizations for the following stages of a product's life cycle: production and use

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Chemicals in Products](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production
- Construction
- Electronics
- Energy
- Health
- Labour
- Pharmaceuticals
- Public, private, blended finance
- Retail
- Textiles
- Transportation
- Waste
- Other: _____

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

- Agriculture and Food
- Biodiversity
- Climate Change
- Health
- Human Rights
- Sustainable Consumption and Production
- World of Work
- Other: _____

b. Please explain your response, including examples if possible. *(Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):* "Chemicals and contaminants linked to cancer can be found in many everyday products i.e. formaldehyde in cosmetics. In addition, recycled products often carry the burden of contaminants from their first use, e.g. heavy metals."

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Data based risk assessment to justify regulatory measures”

13. Endocrine-disrupting chemicals (EDCs)

Screening Question - Endocrine-disrupting chemicals (EDCs)

An EDC is an exogenous substance or mixture that alters the function(s) of the endocrine system and consequently causes adverse health effects in an intact organism, or its progeny, or (sub)populations. Substantial efforts have been made over the past two decades to develop a better scientific understanding of EDCs and their characteristics, to test and identify EDCs, and to develop scientific approaches in order to support risk management measures.

In 2012, at ICCM3, EDCs were identified as an issue of concern under SAICM, and SAICM stakeholders decided “to implement cooperative actions on endocrine-disrupting chemicals with the overall objective of increasing awareness and understanding among policymakers and other stakeholders” and invited IOMC organisations to lead and facilitate a series of cooperative actions on EDCs, which was renewed in a Resolution at ICCM4.

Please visit the two-page factsheet on [Endocrine Disrupting Chemicals](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Environmentally Persistent Pharmaceutical Pollutants (EPPPs))*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- b. If you selected "No, other" in the previous question, please elaborate here:

An EDC is an exogenous substance or mixture that alters the function(s) of the endocrine system and consequently causes adverse health effects in an intact organism, or its progeny, or (sub)populations. Substantial efforts have been made over the past two decades to develop a better scientific understanding of EDCs and their characteristics, to test and identify EDCs, and to develop scientific approaches in order to support risk management measures.

In 2012, at ICCM3, EDCs were identified as an issue of concern under SAICM, and SAICM stakeholders decided “to implement cooperative actions on endocrine-disrupting chemicals with the overall objective of increasing awareness and understanding among policymakers and other stakeholders” and invited IOMC organisations to lead and facilitate a series of cooperative actions on EDCs, which was renewed in a Resolution at ICCM4.

Please visit the two-page factsheet on [Endocrine Disrupting Chemicals](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
 No
 Do not know

- a. Please provide a brief explanation for your response*. “The group of chemicals identified as EDC is highly heterogeneous and includes synthetic chemicals used as industrial solvents/lubricants and their byproducts i.e. plastics, Bisphenol A, phthalates, pesticides e.t.c.”

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Legally binding*
 Soft law
 Information sharing and awareness/ Voluntary initiatives
 No international actions are needed
 Other: _____.

- a. Please explain your response, including examples if possible*. “Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible

scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation.”

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Endocrine Disrupting Chemicals](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production*
- Construction*
- Electronics*
- Energy*
- Health*
- Labour*
- Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- Textiles*
- Transportation*
- Waste*
- Other: Furniture, Children's products*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

- Agriculture and Food*
- Biodiversity*
- Climate Change*
- Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

b. Please explain your response, including examples if possible. *(Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):* "A number of pesticides and other common chemicals that act as xenobiotics are suspected or proved to act as EDCs. Also, food consumption is

the most common way to be exposed to EDCs through the food we eat, the packaging it's sold in, and the ways the food is stored and cooked. EDCs present a threat to biodiversity, even in remote areas, numerous wildlife species have been affected by EDCs in the environment. The combination of climate change and EDCs is a serious anthropogenic threat, as an example sewage effluent are a major source of several EDCs which eventually reach large water bodies and potentially contaminate the drinking water supply. Furthermore, EDCs have been linked to numerous adverse human health outcomes including alterations in sperm quality and fertility, abnormalities in sex organs, endometriosis, early puberty e.t.c.”

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Data based risk assessment to justify regulatory measures”

14. Environmentally Persistent Pharmaceutical Pollutants (EPPPs)

Screening Question - Environmentally Persistent Pharmaceutical Pollutants (EPPPs)

Pharmaceuticals, including antibiotics, and their metabolites can enter the environment through a variety of pathways, including wastewater and solid waste from pharmaceutical manufacturing, consumption and excretion, improper disposal of unused or expired products, animal husbandry and aquafarming. Their presence in the environment may result in different adverse effects on wildlife and ecosystems; some well-known cases include endangerment of some vulture species, reproductive failures in fish, and the development of antimicrobial resistance.

Internationally, EPPPs were recognized as an issue of concern under SAICM at ICCM4 in 2015. The same resolution “considers that information dissemination and awareness-raising on EPPP are particularly relevant and that improving the availability of and access to information on such chemicals is a priority”, “recognizes the current knowledge gaps on exposure to and the effects of EPPP”, “decides to implement cooperative actions on EPPP with the overall objective of increasing awareness and understanding among policymakers and other stakeholders”, and “requests all interested stakeholders and organizations to provide support, including expertise, financial and in-kind resources, on a voluntary basis, for such cooperative action, including by participating in developing and making available relevant information and guidance”

Please visit the two-page factsheet on [Environmentally Persistent Pharmaceutical Pollutants](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Hazardous substances within the life cycle of electrical and electronic products (HSLEEP))*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Pharmaceuticals, including antibiotics, and their metabolites can enter the environment through a variety of pathways, including wastewater and solid waste from pharmaceutical manufacturing, consumption and excretion, improper disposal of unused or expired products, animal husbandry and aquafarming. Their presence in the environment may result in different adverse effects on wildlife and ecosystems; some well-known cases include endangerment of some vulture species, reproductive failures in fish, and the development of antimicrobial resistance.

Internationally, EPPPs were recognized as an issue of concern under SAICM at ICCM4 in 2015. The same resolution “considers that information dissemination and awareness-raising on EPPP are particularly relevant and that improving the availability of and access to information on such chemicals is a priority”, “recognizes the current knowledge gaps on exposure to and the effects of EPPP”, “decides to implement cooperative actions on EPPP with the overall objective of increasing awareness and understanding among policymakers and other stakeholders”, and “requests all interested stakeholders and organizations to provide support, including expertise, financial and in-kind resources, on a voluntary basis, for such cooperative action, including by participating in developing and making available relevant information and guidance”

Please visit the two-page factsheet on [Environmentally Persistent Pharmaceutical Pollutants](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
 No
 Do not know

- a. Please provide a brief explanation for your response*. “EPPPs are pharmaceuticals designed to be slowly degradable or even nondegradable to resist chemical degradation during passage through a human or animal body, present a special risk when they enter, persist or disseminate in the environment

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Legally binding*
 Soft law
 Information sharing and awareness/ Voluntary initiatives
 No international actions are needed
 Other: _____.

- a. Please explain your response, including examples if possible*. “Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation.”
3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions prepared by UNEP for more information on available options](#)).*
- Regulatory control measures*
 - Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
 - Options / guidance for economic instruments*
 - Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
 - Measures supporting science-based knowledge and research*
 - Other: _____*
- a. Please explain your response, including examples if possible: _____
4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*
- Lack of technical capacity*
 - Lack of scientific knowledge*
 - Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
 - Difficulty with resource mobilisation*
 - Lack of economically feasible green and sustainable alternatives*
 - Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
 - None, there are no factors preventing action or progress*
 - Other: _____*
- a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects
- REACH: Regulatory framework-restrictions-authorizations
- Already exists regulatory measure i.e. REACH and/or CLP in EU level: restriction-authorization-new hazard class

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Environmentally Persistent Pharmaceutical Pollutants](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production*
- Construction*
- Electronics*
- Energy*
- Health*
- Labour*
- Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- Textiles*
- Transportation*
- Waste*
- Other: Drug pollution, pharmaceutical pollution, water pollution*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

- Agriculture and Food*
- Biodiversity*
- Climate Change*
- Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

- b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)*): “Pharmaceuticals are biologically active substances specifically designed to cause pharmacological effects in living organisms, they have an impact on wildlife and ecosystem health when are not treated in an environmentally sound manner. EPPPs are already found in water all over the world and they can affect the reproductive systems for example in frogs, fish and mussels. As a result, EPPPs can alter organisms and put ecosystems, drinking water, and human health at risk. Also, the combination of drug pollution and/or pharmaceutical pollution and/or water pollution undermines the human right to a clean and healthy environment. The same drivers that cause environmental degradation are worsening the anti-microbial resistance problem. The impacts of anti-microbial resistance could destroy our health and food systems.”

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available*).

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available*).

“Data based risk assessment to justify regulatory measures”

15. Hazardous substances within the life cycle of electrical and electronic products
(HSLEEP)

*Screening Question - Hazardous substances within the life cycle of electrical and electronic products
(HSLEEP)*

Electrical and electronic products (EEP), also referred to as electronic and electrical equipment (EEE), include any device with a circuit, battery or plug. They can contain many chemical additives for certain properties such as flame retardancy. Some chemical additives may be hazardous, including heavy metals and persistent organic pollutants (POPs), and may be released during production, use, transport, and end-of-life treatment (disposal or recycling), leading to environmental and human exposures and possible adverse effects.

HSLEEP was adopted as an EPI at ICCM2 in 2009. Conscious that actions are needed up-, mid- and downstream, a life cycle approach was endorsed. Despite valuable efforts made at all levels, significant challenges remain in regard to identifying, disseminating and implementing best practices at all stages of the life cycle, including design, recycling and disposal.

Please visit the two-page factsheet on [Hazardous Substances within the Life cycle of Electrical and Electronic Products](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Highly Hazardous Pesticides (HHPs))*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Electrical and electronic products (EEP), also referred to as electronic and electrical equipment (EEE), include any device with a circuit, battery or plug. They can contain many chemical additives for certain properties such as flame retardancy. Some chemical additives may be hazardous, including heavy metals and persistent organic pollutants (POPs), and may be released during production, use, transport, and end-of-life treatment (disposal or recycling), leading to environmental and human exposures and possible adverse effects.

HSLEEP was adopted as an EPI at ICCM2 in 2009. Conscious that actions are needed up-, mid- and downstream, a life cycle approach was endorsed. Despite valuable efforts made at all levels, significant challenges remain in regard to identifying, disseminating and implementing best practices at all stages of the life cycle, including design, recycling and disposal.

Please visit the two-page factsheet on [Hazardous Substances within the Life cycle of Electrical and Electronic Products](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
- No
- Do not know

a. Please provide a brief explanation for your response*. "Electronic and electrical products contain a number of hazardous substances, including lead, mercury and other metals, flame retardants and certain phthalates. These hazardous substances can impact human health and the environment through all stages of their life-cycle."

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions prepared by UNEP for more information on available options](#)).*

- Legally binding
- Soft law
- Information sharing and awareness/ Voluntary initiatives
- No international actions are needed
- Other: _____.

a. Please explain your response, including examples if possible*. "Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally

binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation.”

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects

- REACH: Regulatory framework-restrictions-authorizations

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Hazardous Substances within the Life cycle of Electrical and Electronic Products](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production
- Construction
- Electronics
- Energy
- Health
- Labour
- Pharmaceuticals
- Public, private, blended finance
- Retail
- Textiles
- Transportation
- Waste
- Other: _____

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

- Agriculture and Food
- Biodiversity
- Climate Change
- Health
- Human Rights
- Sustainable Consumption and Production
- World of Work
- Other: _____

b. Please explain your response, including examples if possible. *(Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):* "Electrical and electronic products contain chemical

additives such as flame retardants or heavy metals or persistent organic pollutants can lead to environmental and human exposures and possible adverse effects (i.e. affecting workers, entering ecosystems by contaminating the air, water, and soil and entering food chains)

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Data based risk assessment to justify regulatory measures”

16. Highly hazardous pesticides (HHPs)

Screening Question - Highly hazardous pesticides (HHPs)

The FAO and WHO International Code of Conduct on Pesticide Management defines HHPs as: “Pesticides that are acknowledged to present particularly high levels of acute or chronic hazards to health or environment according to internationally accepted classification systems such as the WHO or the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) or their listing in relevant binding international agreements or conventions. In addition, pesticides that appear to cause severe or irreversible harm to health or the environment under conditions of use in a country may be considered to be and treated as highly hazardous”.

At ICCM4 in 2015, HHPs were identified as an issue of concern. In addition, among other actions, governments and other stakeholders supported “concerted action to address HHPs in the context of SAICM” and encouraged “relevant stakeholders to undertake concerted efforts to implement the strategy at the local, national, regional and international levels, with emphasis on promoting agroecologically-based alternatives and strengthening national regulatory capacity to conduct risk assessment and risk management, including the availability of necessary information, mindful of the responsibility of national and multinational enterprises”, and welcomed “the offer of the FAO, UNEP and WHO to develop modalities for international coordination in the context of the IOMC”

Please visit the two-page factsheet on [Highly Hazardous Pesticides](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Lead in Paint)*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here: “The EU Regulation 528/2012/EC, as amended and in force, foresees replacement of higher tier hazard classes active biocidal substances and/ or formulations before placing on the market. As a result, it does not constitute an issue of concern at a national level.”

Technical Questions - Highly hazardous pesticides (HHPs)

The FAO and WHO International Code of Conduct on Pesticide Management defines HHPs as: “Pesticides that are acknowledged to present particularly high levels of acute or chronic hazards to health or environment according to internationally accepted classification systems such as the WHO or the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) or their listing in relevant binding international agreements or conventions. In addition, pesticides that appear to cause severe or irreversible harm to health or the environment under conditions of use in a country may be considered to be and treated as highly hazardous”.

At ICCM4 in 2015, HHPs were identified as an issue of concern. In addition, among other actions, governments and other stakeholders supported “concerted action to address HHPs in the context of SAICM” and encouraged “relevant stakeholders to undertake concerted efforts to implement the strategy at the local, national, regional and international levels, with emphasis on promoting agroecologically-based alternatives and strengthening national regulatory capacity to conduct risk assessment and risk management, including the availability of necessary information, mindful of the responsibility of national and multinational enterprises”, and welcomed “the offer of the FAO, UNEP and WHO to develop modalities for international coordination in the context of the IOMC”

Please visit the two-page factsheet on [Highly Hazardous Pesticides](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
- No
- Do not know

- a. Please provide a brief explanation for your response*. “Further international action, especially in developing countries, is necessary in order to harmonise the existing EU approach that substitutes high hazardous pesticides with active substances and formulations that cause less concern.”

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Legally binding*
- Soft law*
- Information sharing and awareness/ Voluntary initiatives*

- No international actions are needed*
- Other: _____.*

a. Please explain your response, including examples if possible*. “Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation.”

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects
- REACH: Regulatory framework-restrictions-authorizations
- BPR Regulation

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Highly Hazardous Pesticides](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production*
- Construction*
- Electronics*
- Energy*
- Health*
- Labour*
- Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- Textiles*
- Transportation*
- Waste*
- Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

- Agriculture and Food*
- Biodiversity*
- Climate Change*
- Health*
- Human Rights*
- Sustainable Consumption and Production*

- World of Work*
- Other: _____*

- b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)): “HHPs need special attention because they can have high acute human toxicity, chronic and systemic human toxicity and severe environmental hazards.”*

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

Not applicable.

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

Not applicable.

17. Lead in paint

Screening Question - Lead in paint

Lead is a multi-system toxicant for which no safe level of exposure has been identified. Exposure to lead can cause chronic and debilitating health impacts in all age groups, and children are particularly vulnerable to its neurotoxic effects. The widespread use of lead has caused extensive environmental and human exposure across the globe. One major source of exposure, particularly for children, is through “lead paint”, or paint to which lead compounds have been added as pigments, drying agents or anti-corrosives.

Among others, “Lead in Paint” was recognized as an issue of concern under the second session of the International Conference on Chemicals Management (ICCM2) in 2009. The ICCM2 also endorsed the establishment of an international partnership, the Global Alliance to Eliminate Lead Paint (GAELP), to assist in phasing out lead paint worldwide. The GAELP aims to have all countries adopt “legally binding laws, regulations, standards and/or procedures to control the production, import, sale and use of lead paints with special attention to the elimination of lead decorative paints and lead paints for other applications most likely to contribute to childhood lead exposure” and to have all paint manufacturers eliminate “the use of added lead compounds in priority areas” by 2020.

Please visit the two-page factsheet on [Lead in Paint](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Nanotechnology and manufactured nanomaterials)*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Technical Questions - Lead in paint

Lead is a multi-system toxicant for which no safe level of exposure has been identified. Exposure to lead can cause chronic and debilitating health impacts in all age groups, and children are particularly vulnerable to its neurotoxic effects. The widespread use of lead has caused extensive environmental and human exposure across the globe. One major source of exposure, particularly for children, is through “lead paint”, or paint to which lead compounds have been added as pigments, drying agents or anti-corrosives.

Among others, “Lead in Paint” was recognized as an issue of concern under the second session of the International Conference on Chemicals Management (ICCM2) in 2009. The ICCM2 also endorsed the establishment of an international partnership, the Global Alliance to Eliminate Lead Paint (GAELP), to assist in phasing out lead paint worldwide. The GAELP aims to have all countries adopt “legally binding laws, regulations, standards and/or procedures to control the production, import, sale and use of lead paints with special attention to the elimination of lead decorative paints and lead paints for other applications most likely to contribute to childhood lead exposure” and to have all paint manufacturers eliminate “the use of added lead compounds in priority areas” by 2020.

Please visit the two-page factsheet on [Lead in Paint](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
- No
- Do not know

- a. Please provide a brief explanation for your response*. “Children younger than six years old are especially vulnerable to lead poisoning, which can severely affect mental and physical development. At very high levels lead poisoning can be fatal. Lead-based paint and lead-contaminated dust in older buildings are common sources of lead poisoning in children. Also, even small levels of exposure to lead paint can harm adults. Contamination can be caused by only a little bit of lead dust that is easily absorbed by anyone who inhales or ingest it. Once poisoned (neurotoxicity) is for life and can never be reversed.”

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Legally binding
- Soft law

- Information sharing and awareness/ Voluntary initiatives*
- No international actions are needed*
- Other: _____.*

- a. Please explain your response, including examples if possible*. “Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation.”

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions prepared by UNEP for more information on available options](#)).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

- a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

- a. Please explain your response, including examples if possible: _____
5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*
- Academia and industry joint research projects
 - REACH: Regulatory framework-restrictions-authorizations
 - Already exists regulatory measure i.e. REACH and/or CLP in EU level: restriction-authorization-new hazard class
6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Lead in Paint](#) for more information on the topic. If you select "Other", please elaborate your response).*
- Agriculture and food production*
 - Construction*
 - Electronics*
 - Energy*
 - Health*
 - Labour*
 - Pharmaceuticals*
 - Public, private, blended finance*
 - Retail*
 - Textiles*
 - Transportation*
 - Waste*
 - Other: _____*
7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or “New instrument”.

- a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*
- Agriculture and Food*
 - Biodiversity*
 - Climate Change*
 - Health*
 - Human Rights*
 - Sustainable Consumption and Production*

- World of Work*
- Other: _____*

b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)*): “Leaded paint is not used anymore, but children are more likely to ingest lead indirectly by chewing on toys or other objects that are coated in lead paint. The amount of lead that can be absorbed by children is also higher than that of adults. Exposure at work is a common cause of lead poisoning in adults with certain occupations at particular risks.”

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available*).

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available*).

“Data based risk assessment to justify regulatory measures”

Nanotechnology and manufactured nanomaterials

Screening Question - Nanotechnology and manufactured nanomaterials

While no definition has been internationally agreed upon, nanomaterials are commonly defined as materials having at least one external or internal dimension between 1 and 100 nm.

Nanotechnology, i.e. the manipulation of matter at the nanometre scale, has rapidly developed in the past few decades and led to the widespread presence of nanomaterials in consumer products and industrial applications.

Despite multiple benefits associated with the technology, concerns have emerged regarding potential risks posed by manufactured nanomaterials to human health and the environment. In light of these concerns “Nanotechnology and manufactured nanomaterials” was designated an emerging policy issue at the second session of the ICCM in 2009. Stakeholders stressed the need to close knowledge gaps; to understand, avoid, reduce and manage risks; and to review the methods used for testing and assessing safety.

Please visit the two-page factsheet on [Nanotechnology and manufactured nanomaterials](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Per- and polyfluoroalkyl substances (PFASs))*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

Technical Questions - Nanotechnology and manufactured nanomaterials

While no definition has been internationally agreed upon, nanomaterials are commonly defined as materials having at least one external or internal dimension between 1 and 100 nm.

Nanotechnology, i.e. the manipulation of matter at the nanometre scale, has rapidly developed in the past few decades and led to the widespread presence of nanomaterials in consumer products and industrial applications.

Despite multiple benefits associated with the technology, concerns have emerged regarding potential risks posed by manufactured nanomaterials to human health and the environment. In light of these concerns “Nanotechnology and manufactured nanomaterials” was designated an emerging policy issue at the second session of the ICCM in 2009. Stakeholders stressed the need to close knowledge gaps; to understand, avoid, reduce and manage risks; and to review the methods used for testing and assessing safety.

Please visit the two-page factsheet on [Nanotechnology and manufactured nanomaterials](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
- No
- Do not know

a. Please provide a brief explanation for your response*. _____

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Legally binding*
- Soft law*
- Information sharing and awareness/ Voluntary initiatives*
- No international actions are needed*
- Other: _____.*

a. Please explain your response, including examples if possible*. “Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible

scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation.”

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Regulatory control measures*
- Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
- Options / guidance for economic instruments*
- Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
- Measures supporting science-based knowledge and research*
- Other: _____*

a. Please explain your response, including examples if possible: _____

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*

- Lack of technical capacity*
- Lack of scientific knowledge*
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
- Difficulty with resource mobilisation*
- Lack of economically feasible green and sustainable alternatives*
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
- None, there are no factors preventing action or progress*
- Other: _____*

a. Please explain your response, including examples if possible: _____

5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects
- REACH: Regulatory framework-restrictions-authorizations

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Nanotechnology and Manufactured Nanomaterials](#) for more information on the topic. If you select "Other", please elaborate your response).*

- ✓ *Agriculture and food production*
- ✓ *Construction*
- ✓ *Electronics*
- ✓ *Energy*
- ✓ *Health*
- ✓ *Labour*
- ✓ *Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- ✓ *Textiles*
- Transportation*
- ✓ *Waste*
- ✓ *Other: Cosmetics, self-care products*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

- ✓ *Agriculture and Food*
- ✓ *Biodiversity*
- ✓ *Climate Change*
- ✓ *Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

b. Please explain your response, including examples if possible. *(Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

"Nanotechnology is an emerging technology in the field of food and agriculture. Nanomaterials play a keen role in the place of pesticides, fertilizers and biosensors. Also, nanotechnology has the potential to enhance basic construction materials such as cement, concrete, and steel. Nanotechnology in electronics allows for faster, smaller,

and more powerful handheld devices. In energy storage, nanotechnology is used to develop better batteries, such as lithium-ion batteries, with improved energy density, charge and discharge efficiency, and life cycle. Other applications of nanotechnology are in nanomedicine, i.e. nanoparticles are a new and rapidly emerging area in the pharmaceutical and medicinal field. Furthermore, nanofabrics are textiles engineered with small particles that give ordinary materials advantageous properties such as extreme water resistance, odour and moisture elimination e.t.c. Nanoparticles are used in cosmetic products as UV filters or preservatives.

As a result, nanomaterials affect human health and the environment.

Studies have shown that low solubility nanoparticles tend to be more toxic than larger particles of the same material. Exposure to nanomaterials may happen through the skin or inhalation. Inhalation of nanomaterials may lead to inflammation and oxidative stress.

As an example, ultrafine carbon black particles may alter genes in lung cells, lead to inflammation and inhibit the growth of cells that line the circulatory system.

8. What priority level do you attach to this issue for international action?

- Very high*
- High*
- Medium*
- Low*
- Very low*

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available.*)

“Data based risk assessment to justify regulatory measures”

18. Per- and polyfluoroalkyl substances (PFASs)

Screening Question - Per- and polyfluoroalkyl substances (PFASs)

The PFAS family is composed of thousands of synthetic organic chemicals that contain at least one perfluorocarbon moiety (e.g. –CF₂–) in their molecular structures. These substances have been widely used in numerous commercial and consumer applications since the late 1940s.

Since the late 1990s and early 2000s, studies have been conducted to assess some “long-chain” PFASs. Their findings resulted in the listing of perfluorooctanesulfonic acid (PFOS) and its precursors under the Stockholm Convention in 2009. That same year, at ICCM2, SAICM stakeholders identified “managing PFASs and the transition to safer alternatives” as an issue of concern. A resolution by ICCM2 further invited intergovernmental organisations, governments and other stakeholders “to consider the development, facilitation and promotion in an open, transparent and inclusive manner of national and international stewardship programmes and regulatory approaches to reduce emissions and the content of relevant perfluorinated chemicals of concern in products and to work toward global elimination, where appropriate and technically feasible”

Please visit the two-page factsheet on [Per- and polyfluoroalkyl substances \(PFASs\) and the transition to safer alternatives](#) for more information on the topic.

1. **Entry question:** Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the Conclusion page)*

- Yes
- No, I do not know enough about this issue
- No, this issue is not relevant to my country or institution
- No, other

- a. If you selected "No, other" in the previous question, please elaborate here:

The PFAS family is composed of thousands of synthetic organic chemicals that contain at least one perfluorocarbon moiety (e.g. –CF₂–) in their molecular structures. These substances have been widely used in numerous commercial and consumer applications since the late 1940s.

Since the late 1990s and early 2000s, studies have been conducted to assess some “long-chain” PFASs. Their findings resulted in the listing of perfluorooctanesulfonic acid (PFOS) and its precursors under the Stockholm Convention in 2009. That same year, at ICCM2, SAICM stakeholders identified “managing PFASs and the transition to safer alternatives” as an issue of concern. A resolution by ICCM2 further invited intergovernmental organisations, governments and other stakeholders “to consider the development, facilitation and promotion in an open, transparent and inclusive manner of national and international stewardship programmes and regulatory approaches to reduce emissions and the content of relevant perfluorinated chemicals of concern in products and to work toward global elimination, where appropriate and technically feasible”

Please visit the two-page factsheet on [Per- and polyfluoroalkyl substances \(PFASs\) and the transition to safer alternatives](#) for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- Yes
- No
- Do not know

a. Please provide a brief explanation for your response*. “The defining trait of PFAS is their persistence. These synthetic, human-made chemicals don’t degrade. PFAS are commonly found in things like food packaging , non-stick cookware, textiles, manufacturing electronics e.t.c.”

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*

- Legally binding
- Soft law
- Information sharing and awareness/ Voluntary initiatives
- No international actions are needed
- Other: _____.

- a. Please explain your response, including examples if possible*. “Soft-law refers to quasi-legal instruments (like recommendations or guidelines) which do not have any legally binding force. Soft law contains aspirational goals that aim for the best of possible scenarios. The term initially emerged in the context of international law. Because of the nature of the soft law, as a gap-filler, giving guidance to States and other stakeholders, in the absence of binding legal norms, it can be easily combined with information sharing, awareness and/or voluntary initiatives. As a result, the suggested combination can lead to a more obligatory future legislation.”
3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the [catalogue of international actions](#) prepared by UNEP for more information on available options).*
- Regulatory control measures*
 - Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers))*
 - Options / guidance for economic instruments*
 - Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
 - Measures supporting science-based knowledge and research*
 - Other: _____*
- a. Please explain your response, including examples if possible: _____
4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)?*
- Lack of technical capacity*
 - Lack of scientific knowledge*
 - Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
 - Difficulty with resource mobilisation*
 - Lack of economically feasible green and sustainable alternatives*
 - Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
 - None, there are no factors preventing action or progress*
 - Other: _____*
- a. Please explain your response, including examples if possible: _____
5. Can you point to existing initiatives that could be replicated or scaled up at the international level? *(Open space answer. Please share a weblink to the initiative(s) if available).*

- Academia and industry joint research projects
- REACH: Regulatory framework-restrictions-authorizations
- Already exists regulatory measure i.e. REACH and/or CLP in EU level: restriction-authorization-new hazard class

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on [Per- and polyfluoroalkyl substances \(PFASs\)](#) for more information on the topic. If you select "Other", please elaborate your response).*

- Agriculture and food production*
- Construction*
- Electronics*
- Energy*
- Health*
- Labour*
- Pharmaceuticals*
- Public, private, blended finance*
- Retail*
- Textiles*
- Transportation*
- Waste*
- Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments...).*

UNEP, SAICM or "New Instrument"

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)):*

- Agriculture and Food*
- Biodiversity*
- Climate Change*
- Health*
- Human Rights*
- Sustainable Consumption and Production*
- World of Work*
- Other: _____*

- b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the [UNEP assessment paper on linkages with other clusters related to chemicals and waste](#)*): “ Agriculture and PFAS chemicals can intersect through air, water, and soil. PFAS in the environment can enter the food supply through plants and animals grown, raised, or processed in contaminated areas. It is also possible for very small amounts of PFAS to enter foods through food packaging, processing, and cookware. Also, PFAS are used in numerous types of building products and textiles with functions as weatherproofing, corrosion prevention and stain resistance. In addition, PFAS are used in electronic products due to their unique properties that improve product quality and performance. Some PFAS bioaccumulate and bind to proteins in biota and humans. As a result, PFAS are a concern because they do not break down in the environment and lead to potential health effects like developmental effects to fetuses, to breastfed infants, cancer (testicular, kidney), immune effects and thyroid.

8. What priority level do you attach to this issue for international action?

- Very high*
 High
 Medium
 Low
 Very low

9. Is there any priority further work you would like to suggest at the national level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available*).

“Monitoring in different matrices and biomonitoring in target populations”

10. Is there any priority further work you would like to suggest at the regional level*? (*Open space to elaborate. Please share a weblink to the suggestion(s) if available*).

“Data based risk assessment to justify regulatory measures”

Conclusion:

Thank you for having reached this point in the form. You are now on the last page. Below are a final set of questions covering all 19 issues of concern.

GCO-II issues:

[Arsenic](#) | [Cadmium](#) | [Glyphosate](#) | [Lead](#) | [Microplastics](#) | [Neonicotinoids](#) | [Organotins](#) | [Phthalates](#) | [Polycyclic Aromatic Hydrocarbons \(PAHs\)](#) | [Triclosan](#) | [Bisphenol A \(BPA\)](#)

List of SAICM issues:

[Chemicals in products \(CiP\)](#) | [Endocrine-disrupting chemicals \(EDCs\)](#) | [Environmentally Persistent Pharmaceutical Pollutants \(EPPPs\)](#) | [Hazardous substances within the life cycle of electrical and electronic products \(HSLEEP\)](#) | [Highly hazardous pesticides \(HHPs\)](#) | [Lead in paint](#) | [Nanotechnology and manufactured nanomaterials](#) | [Per- and polyfluoroalkyl substances \(PFASs\) and the transition to safer alternatives](#)

Please submit your completed form via email by **15/08/2023** COB Central European time (CET).

1. From the list of 19 issues, which issue(s) do you think is/are the most urgent? *(Multiple options from the list of 19 issues)*

- Arsenic
- Bisphenol A (BPA)
- Cadmium
- Glyphosate
- Lead
- Microplastics
- Neonicotinoids
- Organotins
- Phthalates
- Polycyclic Aromatic Hydrocarbons (PAHs)
- Triclosan
- Chemicals in products (CiP)
- Endocrine-disrupting chemicals (EDCs)
- Environmentally Persistent Pharmaceutical Pollutants (EPPPs)
- Hazardous substances within the life cycle of electrical and electronic products (HSLEEP)
- Highly hazardous pesticides (HHPs)
- Lead in paint
- Nanotechnology and manufactured nanomaterials
- Per- and polyfluoroalkyl substances (PFASs) and the transition to safer alternatives

a. Please explain your response. *(Open space to elaborate).*

Glyphosate: Exposure to Glyphosate poses a risk to human health and a variety of living organisms and threatens biodiversity and the future of agriculture.

Microplastics are so tiny that can damage the human cells. The damage includes allergic reactions and cell death.

Phthalates are added to plastics to increase their flexibility, transparency, durability, and longevity. They are toxic for reproduction and interfere with the human hormonal system.

Polycyclic aromatic hydrocarbons (PAHs) are a threat to public health and the environment, they are carcinogenic to humans and highly toxic to aquatic life.

Endocrine-disrupting chemicals (EDCs) are substances in the environment, food sources, personal care products and manufactured products that interfere with the body's endocrine system. EDCs can disrupt many different hormones which is why they have been linked to numerous adverse human health outcomes including alterations in sperm quality and fertility, abnormalities in sex organs, endometriosis, early puberty, altered nervous system function, immune function, certain cancers, respiratory problems, metabolic issues, diabetes, obesity, cardiovascular problems, growth, neurological and learning disabilities.

Per- and polyfluoroalkyl substances (PFASs) and the transition to safer alternatives: Several PFASs are known as "forever chemicals" with recognized toxicity and are hardly degraded in the natural environment. Therefore, they accumulate in water and soil and are transported over large distances by air. PFASs negatively affect many important life processes, including the immune system and endocrine system.

2. From the list of 19 issues, which issue(s) is/are the most actionable? *(Multiple options from the list of 19 issues)*

- Arsenic
- Bisphenol A (BPA)
- Cadmium
- Glyphosate
- Lead
- Microplastics
- Neonicotinoids
- Organotins
- Phthalates
- Polycyclic Aromatic Hydrocarbons (PAHs)
- Triclosan
- Chemicals in products (CiP)
- Endocrine-disrupting chemicals (EDCs)
- Environmentally Persistent Pharmaceutical Pollutants (EPPPs)
- Hazardous substances within the life cycle of electrical and electronic products (HSLEEP)
- Highly hazardous pesticides (HHPs)
- Lead in paint
- Nanotechnology and manufactured nanomaterials
- Per- and polyfluoroalkyl substances (PFASs) and the transition to safer alternatives

b. Please explain your response. *(Open space to elaborate).*

Glyphosate: Exposure to Glyphosate poses a risk to human health and a variety of living organisms and threatens biodiversity and the future of agriculture.

Microplastics are so tiny that can damage the human cells. The damage includes allergic reactions and cell death.

Endocrine-disrupting chemicals (EDCs) are substances in the environment, food sources, personal care products and manufactured products that interfere with the body's endocrine system. EDCs can disrupt many different hormones which is why they have been linked to numerous adverse human health outcomes including alterations in sperm quality and fertility, abnormalities in sex organs, endometriosis, early puberty, altered nervous system function, immune function, certain cancers, respiratory problems, metabolic issues, diabetes, obesity, cardiovascular problems, growth, neurological and learning disabilities.

Per- and polyfluoroalkyl substances (PFASs) and the transition to safer alternatives: Several PFASs are known to be toxic and they are hardly degraded in the natural environment and, therefore, accumulate in water and soil and are transported over large distances by air. PFASs negatively effect many important life processes, including the immune system and endocrine system.

3. Are there any other observations you wish to note? (*Open space to elaborate*).

Suggested future actions:

Strategic planning concerning innovation and research to ensure that the results meet the needs of stakeholders and enhances collaboration and implementation of innovation's results that can contribute to a safer society.

Applications of Artificial Intelligence (AI), which is an umbrella term for explaining advanced computer intelligence. It summarizes the efforts to simulate human cognitive thinking and decision-making, leading to machines able to use experience for learning, adapting, adjusting and revising to new inputs on basis of large amounts of data. The possibility of using AI should be explored.

Emerging biological and chemical evidence types “-omics”, that are novel methods of analysis that can lead to the identification of large molecules such as proteins or metabolites which can provide information about people, their activities and their environment.

In silico methods should find their way into decision making processes for regulatory purposes in order to properly address concerns for human health and the environment, while conforming to legal requirements and respecting animal rights.