
Fourth meeting of the intersessional process considering the Strategic Approach and the sound management of chemicals and waste beyond 2020

Bucharest, Romania, 23-27 March 2020

Item 3 (b) of the provisional agenda¹

Development of recommendations for consideration by the fifth session of the International Conference on Chemicals Management: Strategic objectives and targets

Supplementary information on proposed targets prepared by the Technical Working Group on targets, indicators and milestones for SAICM and the sound management of chemicals and waste beyond 2020

Note by the secretariat

1. The secretariat has the honour to circulate, in the annex to the present note, supplementary information from the Technical Working Group on targets, indicators and milestones. As an outcome of their work, the Technical Working Group also submitted proposed targets for beyond 2020 as set out in meeting document SAICM/IP.4/3.
2. The document presented in this annex is intended to provide additional information and to document a number of supporting ideas and concepts that were put forward at the face-to-face meeting, but not necessarily agreed to or discussed in detail.
3. Participants may wish to refer to the document for additional information in the discussions on strategic objectives and targets. The document is meant as a reference and has not been formally edited by the secretariat.

¹ SAICM/IP.4/1

Annex

Supplementary information on proposed targets, indicators and milestones prepared by the Technical Working Group on targets, indicators and milestones for SAICM and the sound management of chemicals and waste beyond 2020

1. Background and Methodology of the Technical Working Group

a. Background

As an outcome of third meeting of the intersessional process (IP3), a Technical Working Group was established on targets, milestones and indicators to support further work in this area before the fourth meeting of the intersessional process (IP4). The product(s) of this technical group were intended to support SAICM stakeholders to make progress at the fourth meeting of the intersessional process (IP4).

The Technical Working Group was established with a balanced representation of regions, sectors (health, labour, agriculture and environment) and stakeholders. Experts were nominated by regional representatives through the fifth session of the International Conference on Chemicals Management (ICCM5) Bureau. A complete list of nominated experts can be found in Appendix I.

The Technical Working Group submitted a Meeting Document SAICM/IP.4/3 as an outcome of the work done by the group. The document outlines proposed targets for beyond 2020 and provides a structured format containing reflections upon possible indicators and pertinent considerations in assisting the intersessional process to keep future target formulations concise. Participants may wish to use this document as a starting point in their deliberations on proposed targets for beyond 2020.

In addition to the Meeting Document, the Technical Working Group has also prepared this Information Document outcome of its work to provide additional information and document a number of ideas and concepts that were put forward at the face-to-face meeting but not necessarily agreed to or discussed in further detail. Participants may wish to refer to the document for additional information. The document is meant as a reference only.

This document contains the following:

1. Background and methodology of the Technical Working Group;
2. General reflections on milestones;
3. An outline identifying suggestions for next steps in target, indicator formulation;
4. Collection of overarching views exchanged at the Technical Working Group including identified gaps and overlapping issues;
5. Further information on the cross-cutting high-level indicators proposed under Targets A3, E1 and E4;
6. Information on links to other agendas.

b. Methodology of the Technical Working Group

As part of the outcome of the third meeting of the intersessional process (IP3), the SAICM secretariat created a webpage² to support the Technical Working Group and post relevant documents and output documents that help guide and inform the work of the Technical Working Group.

The Technical Working Group had a total of four e-meetings and one face-to-face meeting. The Technical Working Group had its first e-meeting on 10 January 2020.

The objective of the first e-meeting was to initiate the work of the technical working group. A total of 27 experts attended the first e-meeting. All regions and sectors were represented. The group reviewed and discussed the reference documents developed by the co-chairs.

A second e-meeting took place 03 February 2020. The objective of the meeting was to set expectations for the group and explain the expected outputs that will come out of the face-to-face meeting 13-14 February in Geneva, Switzerland.

A face-to-face meeting took place 13-14 February 2020 in Geneva, Switzerland. There was a total of 37 participants. All regions and sectors were represented.

The face-to-face meeting objectives included:

1. Make suggestions for a cohesive and coherent target-indicator framework including identification of existing sources of data and data collection, as well as recommendations on a set of high-impact/high priority targets and associated indicators.
2. Building clarity among group experts of how milestones might be developed.
3. Capture views of experts on waste for the beyond 2020 framework.
4. Present potential factsheet samples and discuss how they could be used in moving forward.
5. Agree on group deliverable for the fourth meeting of the intersessional process (IP4).

The third e-meeting took place 20 February 2020 and the fourth e-meeting took place on 11 March 2020. Both e-meetings were convened post the face-to-face meeting and were used to address any final comments and finalize Meeting Document SAICM/IP.4/3³ and Information Document SAICM/INF/IP.4/15 respectively.

² <http://saicm.org/Beyond2020/TechnicalWorkingGroup/tabid/8287/language/en-US/Default.aspx>

³ http://saicm.org/Portals/12/documents/meetings/IP4/Docs/SAICM_IP4_3_Proposed-targets-TWG-SAICM-smcw-beyond-2020.pdf

OVERVIEW OF THE HOMEWORK AND TARGET FORMULATION

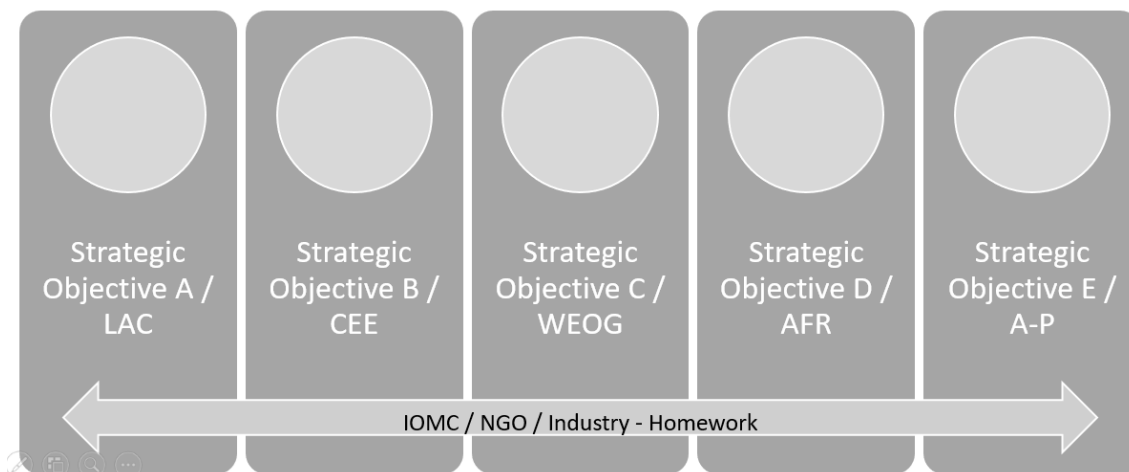
In preparation of the face-to-face meeting held 13-14 February 2020 in Geneva, Switzerland, the co-chairs of the Technical Working Group requested the Technical Working Group experts to complete a homework assignment. The group was divided into 7 smaller groups (5 regional groups, UN/IOMC, NGO + industry). Each regional group was assigned with a specific set of targets under the SAICM Strategic Objectives.

The UN/IOMC group was tasked with identifying a limited number of high-level indicators that would help to communicate with decision-makers high-level messaging and build political momentum.

The NGO + Industry group was tasked to do a general review of all the targets as well as identify key public messages linked to the sound management of chemicals and waste that can help communicate associated risks and benefits to human health and the environment.

Additionally, the NGO group provided a list of identified existing, comprehensive data-sets that are available and relevant to track progress as well as the identification of related indicators and their link to the SDGs (reference to NGO and industry submission can be found in Appendix II).

Figure 1: Overview of homework



INPUT AND OUTPUT DOCUMENTS OF THE TECHNICAL WORKING GROUP

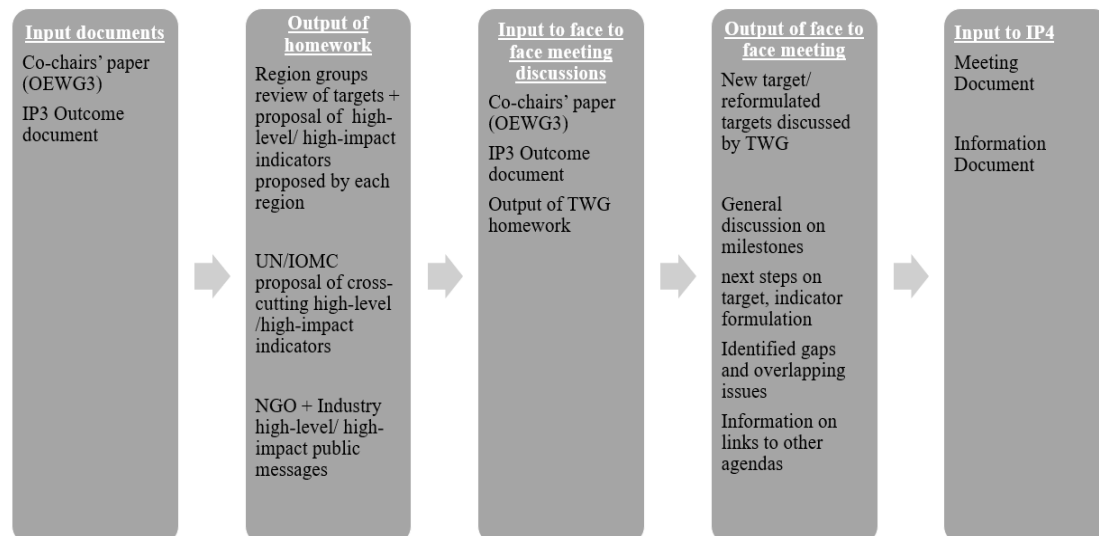
As set in the mandate for the Technical Working Group, the group used the following initial key information documents as the initial baseline for work⁴.

1. **SAICM/IP.3/12** - Report of the third meeting in the intersessional process to consider the Strategic Approach and the sound management of chemicals and waste beyond 2020
2. **SAICM/IP.3/INF/2** - Report from the technical expert workshop on indicators for the Strategic Approach Beyond 2020
3. **SAICM/IP.3/INF/13** - Update on the Strategic Approach Global Environment Facility Project
4. **SAICM/IP.2/8** - Proposal on objectives in support of the 2030 Agenda and related milestones
5. Initial mapping of IOMC Indicators to the current objectives and targets of B-2020
6. **Thought Starter on Beyond 2020 Indicators and Milestones: Chemical Safety Contributions to the SDGs** - Submission from IPEN
7. **Input towards the Beyond 2020 Indicator Development Process** - Submission from ILO

For the homework assignment, the groups were asked to use the *Paper by the Co-Chairs of the intersessional process for the third meeting of the open-ended working group* SAICM/OEWG.3/4 and the *Report of the third meeting of the intersessional process* SAICM/IP.3/12 as input documents for their work. The output of the group homework was used as an input for the face-to-face meeting discussions.

The Technical Working Group has produced two outputs to be used to inform discussions during the fourth meeting of the intersessional process (IP4). These include a Meeting Document SAICM/IP.4/3 with proposed targets prepared by the Technical Working Group experts for Strategic Objectives A-E and an Information Document SAICM/INF/I.4/15 with supplementary information that was identified by the group but was not included in the Meeting Document.

Figure 2: Input and output documents of the Technical Working Group



⁴ Key information documents can be found in the following link:

<http://saicm.org/Beyond2020/TechnicalWorkingGroup/tabid/8287/language/en-US/Default.aspx>

2. General discussion on milestones

As agreed at the third meeting of the intersessional process (IP3), the Technical Working Group, in their face-to-face meeting, discussed the role of milestones and how they can be advanced in the intersessional process.

The following is a summary of views exchanged on the topic of milestones:

- Identification of which targets would be most appropriate to have milestones on and what kind /type of milestones they could be.
- Further discussion is needed on whether higher-level milestones/indicators are necessary and how they may capture the more general sense of what the instrument would like to achieve.
- Milestone use in showing progress could be helpful, requires specific planning in relation to a clear and specific target; using milestones together with a roadmap or workplan, which identifies different steps could help ensure information on progress is not lost.
- The group had differing views on the need for milestones for each target.
- Varying opinions, from the use of milestones to capture the ‘bigger picture’ of what the beyond 2020 instrument is, to using milestones at the indicator level to break down and be able to measure progress.
- Explored the difficulties in determining milestones to address different ‘starting points’ of countries, availability of resources to advance reaching milestones.
- Before identifying milestones, SMART targets and good indicators should be in place.
- Milestone should be used to get key actors ‘on board’ with meeting targets/indicators.
- There should be a logical structure with a clear role for milestones – some may be achieved earlier than others; use of timebound definition (by 20xx) for targets or indicators in order to design milestones in line with the set timeline.
- View of milestones as stages to be followed; factsheets could identify agreed steps to take to reach a target.
- Role of milestones in reporting was discussed.

The Technical Working Group proposed the following further steps in terms of milestones:

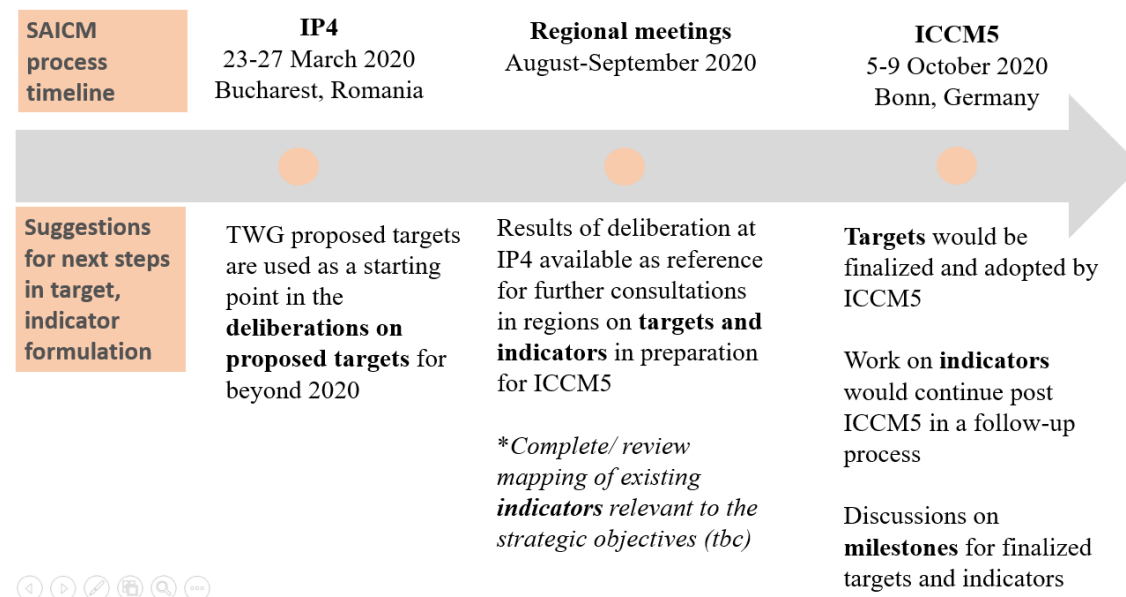
- Review different approaches to milestones (e.g. lead in paint emerging policy issue or looking at other conventions that apply milestones) to gain a common understanding on how milestones can be used in the beyond 2020 instrument.
- Upon finalization of targets, conduct an exercise to identify which targets would benefit from having milestones.
- Provide information in order to inform further deliberations after targets are set.

The Technical Working Group suggested that work on milestone definition should not start before the fifth session of the International Conference on Chemicals Management (ICCM5).

3. Outline identifying suggestions for next steps in target and indicator formulation

The Technical Working Group has identified suggestions for next steps in targets and indicators formulation leading up to the fifth session of the International Conference on Chemicals Management (ICCM5).

Figure 3: Outline identifying suggestions for next steps in target and indicator formulation⁵



⁵ IP4 is postponed. At the time of issuing this paper, no new date is confirmed.

4. Collection of overarching views exchanged at the Technical Working Group including identified gaps and overlapping issues

Following is a collection of overarching views exchanged by members of the Technical Working Group, along with observations and issues highlighted by expert presentations during the face-to-face meeting.

Linkages with other existing agendas:

- The High-Level Political Forum, on 25 September 2019, declared “...We will maintain the integrity of the 2030 Agenda, including by ensuring ambitious and continuous action on the targets of the Sustainable Development Goals with a 2020 timeline⁶”. Therefore, SDG Indicators with 2020 targets, including 12.4, remain valid beyond the target date and continue to be monitored against as the targets are not reached⁷?
- The ultimate goal is to align the language of the frameworks of relevant conventions. At least the related targets and indicators should be referenced in the other framework, even better if they are aligned to complement each other and explicit instructions are provided in both frameworks⁸;
- Create tangible links to key related areas such as biodiversity, climate change and resource efficiency/circularity.

Issues on reporting⁹:

- Importance of having mechanism at the national level for systematic data and information collection and processing;
- Quality control exercises needed to identify data errors/inconsistencies;
- Handbooks and manuals with clear instructions facilitate reporting process at the national level;
- Format of reporting allows for the comparability of data among the different Parties.

Other:

- Opportunities from lessons learned from BRS for SAICM to look at indicators together with the targets, where and what data is available;
- SAICM targets can encompass more than a ‘Parties’-related focus;
- Focus targets on what we are trying to achieve by when;
- Ensure clear language as to what is being measured to ensure consistency;
- Identify data sources/methodologies for gathering the required information/data as a way to ensure that the proposed indicators are measurable and that their measurement is feasible;
- Helpful to clarify/describe how each indicator provides a measurable and meaningful demonstration of the target and what it intends to measure since in some cases the links between the indicator and the target are not clear;
- Need realistic indicators, avoid duplication of indicators;
- Note champions (responsible) of target.

⁶ <https://undocs.org/en/A/RES/74/4> paragraph 4

⁷ Presentation on [SDGs: 2020 targets, indicators on chemicals](#) - World Health Organization

⁸ Presentation on [Cross-cutting linkages](#) - Bob Watson

⁹ Presentation on [Chemical Conventions Experience](#) - Secretariat of the Basel, Rotterdam and Stockholm Conventions

Members of the Technical Working Group also exchanged views on gaps and overlapping issues. This discussion was conducted after time to briefly review the overall draft framework of the targets. Table 1 below is only a reflection of the views expressed by members of the Technical Working Group.

Table 1: Collection of views exchanged at the Technical Working Group on gaps and overlapping issues

Beyond 2020 instrument	Gaps
<p>General considerations:</p> <ul style="list-style-type: none"> • Links to SDGs and other conventions, such as biodiversity need strengthening in the framework; element of climate change is missing. • Gaps on how targets will help to fulfil objectives of the beyond 2020 instrument, knowledge on status of the environment. • Some targets are good, but need to be measured somehow; consideration of the evaluation of the targets as well as reporting (who, how often, etc.) • Gender disaggregated data missing. • Need for balanced targets meeting both needs to developing and developed countries. • Baselines need to be identified at some stage upon selection of indicators. • Upon resolution of [waste], indicators need to be reviewed in light of the decision. • Consistency in use of terminology, method of using timing issue throughout the target/indicator framework needs to be reviewed before finalization. 	
<p>Strategic Objective A: [Measures are identified, implemented and enforced in order to prevent or, where not feasible, minimize harm from chemicals throughout their life cycle [and waste];]</p>	<ul style="list-style-type: none"> • Need short/medium and long-term considerations as availability of resources to deal with these issues differs from country to country. • Issue of periodicity could be addressed in the indicators. • Important to have synergies with other MEAs but independent identity of the beyond 2020 instrument is also important. • Need specific reference to ‘children’ rather than vulnerable populations • GHS may be lost if not placed at target level.
<p>Strategic Objective B: Comprehensive and sufficient knowledge, data and information are generated, available and accessible to all to enable informed decisions and actions.</p>	<ul style="list-style-type: none"> • Information on chemicals cannot easily be obtained at this stage. • Overlapping between A3 and A4 and B2 and B3 respectively. • Building block missing is conducting monitoring (environmental, in humans) which determines that you have moved towards the objective.

	<ul style="list-style-type: none"> • Concept of prioritizing missing: how to identify priorities with regard to chemical issues. • Chemicals in products are not included under this objective.
Strategic Objective C: Issues of concern [that warrant [global][and][joint] action] are identified, prioritized and addressed	<ul style="list-style-type: none"> • Gap in looking at prioritization, not clear about the difference in national circumstances, also not clear about the mechanism for prioritization, who will prioritize. • Gender implications need to be addressed.
Strategic Objective D: Benefits to human health and the environment are maximized and risks are prevented or, where not feasible, minimized through safer alternatives, innovative and sustainable solutions and forward thinking.	<ul style="list-style-type: none"> • Enablement of innovation is missing, no link to innovation in the targets. • None of the targets measure whether the first part of the objective “benefits of human health and the environment” is maximised. • Idea behind the objective is not fully covered by the targets. • Target mentions associations – what if there are no associations in a region?
Strategic Objective E: [The importance of the sound management of chemicals and waste as an essential element to achieving sustainable development is recognized by all [; adequate financial and non-financial resources are [identified and] mobilized; actions are accelerated; and necessary [transparent and accountable] partnerships are established to foster cooperation among stakeholders].]	<ul style="list-style-type: none"> • Children and vulnerable populations are missing. • Issue of risks is missing in the current targets. • Capacity building is needed around the issue of strengthening partnerships. • New target E5 is not very action oriented. No mechanism to make it certain what specific action or mechanism should be established.

5. Further information on the cross-cutting high-level indicators proposed under Targets A3, E1 and E4.

The IOMC members of the Technical Working Group proposed a set of high-level indicators **that would help to communicate** with decision-makers high-level messaging and build political momentum (within the relevant UN and international organizations as well as with their constituencies). The indicators proposed included some of the “IOMC Indicators of Progress” published earlier.

The Technical Group agreed to include the proposed health and environmental impact indicators in Meeting Document SAICM/IP.4/3. The Group agreed that the proposed health and environmental impact indicators from the Meeting Document require further discussion. Furthermore, all of the “IOMC Indicators of Progress” are included in the fact sheets presented on each target in the Meeting Document.

Further information on the cross-cutting high-level indicators proposed by the IOMC members of the Technical Working Group under Targets A3, E1 and E4 is set out below. As noted in the Meeting Document, the Technical Working Group did not agree on indicators.

Target A3 – By [xx], measures identified to prevent or, minimize harm from chemicals throughout their life cycle [and waste], are implemented and enforced by [countries] [governments].

Waste-related indicators

Depending on how the scope of waste is defined in the beyond 2020 instrument, it is suggested by the IOMC group that indicators include those that can be drawn from the suite of waste-related SDG indicators, and components therein, as relevant: 12.4.2 on hazardous waste (custodians UNSD/UNEP – partners OECD, Eurostat, UNU); 12.5.1 on recycling rate (custodians UNSD/UNEP, partners OECD/Eurostat/UNU, Tier III), 11.6.1 urban solid waste (custodian UN-Habitat, Tier II), and SDG 12.3.1a on food loss (FAO, Tier II) and 12.3.1.b food waste (UNEP, Tier II). Further work is needed to identify what the relevant elements are in this indicator suite for the new instrument. The established waste-related SDG indicators embed a cross-sectoral approach and can provide further opportunities to foster cross-sectoral and multi-stakeholder collaboration.

Countries which have implemented pesticide legislation based on the FAO/WHO International Code of Conduct

The IOMC group noted the lack of agriculture-related indicators in the current proposals. As such, the above is proposed by the IOMC group.

This shows good cross-sector collaboration and is well-established. Furthermore, it represents key sectors that can easily be communicated, and which relate to some of the largest sectors (health, labour, agriculture and environment), economic/sustainable development, and is applicable to all countries, notably least developed countries (thus, easily intersects with the SDGs), and with other relevant stakeholders.

The indicator is an already-established IOMC indicator.

Implementation of the GHS

Implementation of the GHS provides a unique opportunity to show multi-sectoral and multi-stakeholder work, with ILO, OECD, WHO, UNIDO, FAO, UNEP and UNITAR (and others, at least indirectly) running activities on this, as are governments, industry stakeholders, trade unions and NGOs.

A developing “coalition” under the GHS global partnership (ILO/OECD/UNITAR) is also bringing together stakeholders in order to promote implementation of the GHS. As such, there is a great opportunity for us to “succeed” against target Alt 1 A3 proposed during IP3 (By 20XX [legal

requirements] to implement the GHS have been adopted in countries) which can be a source for communication and highlighting. Some stakeholders, notably ECHA, have shown various tools to communicate the value of the GHS to consumers, and this could be utilized.

The implementation of the GHS is already an established indicator. More attention to the topic will provide more resources. In turn, this will allow for greater tracking of numbers of implementation. The data can be gathered periodically and regularly.

Number of countries that have legislation in place to manage industrial and consumer chemicals

A detailed proposal for the above indicator, to fill a key gap in current global indicators, was provided at OEWG3, and is contained in SAICM/OEWG.3/INF/18¹⁰.

In summary, to complement the impact of the GHS for the reduction of risks from industrial and consumer chemicals, many countries have implemented legislation allowing them to prioritise chemicals for risk management, perform a risk assessment on priority chemicals and implement, if needed, risk reduction measures based on the outcome of the risk assessment. Unfortunately, many countries still lack such legislation for industrial and consumer chemicals and cannot manage the risks of chemicals that have been recognised as needing risk reduction measures in other countries (e.g. chemicals listed on Annex III of the Rotterdam Convention).

It is proposed by the IOMC group that the indicator count countries that have implemented a legislatively mandated management system that covers a number of technical elements, such as data gathering, risk assessment and risk management. Developing risk assessments for individual chemicals or groups of chemicals requires considerable expertise and resources. To save resources it is important that countries cooperate and as much as possible and use what has already been performed in other countries. It is therefore proposed by the IOMC group that countries also qualify if they implement risk management measures based on:

- risk assessments (fully or partially) performed in other countries;
- screening risk assessments; or
- generic risk assessments (e.g. certain combinations of hazards and uses for which a high probability of risk for human health or the environment is predicted, such as carcinogens in certain consumer preparations).

Methodology and data custodian: OECD

Target E1- All countries and stakeholder organizations at the high[est] level recognize the importance of and demonstrate their commitment to the sound management of chemicals [and waste] as a contribution to sustainable development [and the 2030 Agenda].

Industry involvement

A key element to increasing levels of success in the new instrument will be the engagement with and contribution of the private sector. Possible high-level indicators could be:

- Number of companies that implement sound management of chemicals/ responsible care policies- *this could be made broader to “... that implement broadly-accepted standards”*
- Number of governments and the private sector applying extended producer responsibility (EPR).

¹⁰ http://www.saicm.org/Portals/12/Documents/meetings/OEWG3/inf/OEWG3-INF-18_additional_IOMC-indicator-pdf

These are key developing themes under the beyond 2020 instrument, and thus could be key indicators. EPRs are valuable to policy makers and also engage with the public, increasing awareness of consumption and waste. Similarly, it helps with the waste element of the beyond 2020 instrument (without needing to define/decide on the scope of waste).

The indicator would seem to be easy to establish. The indicator could draw from SDG 12.6.1 ‘Number of companies publishing sustainability reports’ (custodian: UNEP/ UNCTAD, Tier II) and the Global Reporting Initiative.

Proportion of the sectors and stakeholders participating in the ICCM, any subsidiary bodies, the bureau and regional meetings.

The IOMC group proposes the above indicator relating to multisectoral and multistakeholder engagement in the beyond 2020 instrument.

Rationale/Gaps/challenges: This indicator is proposed due to the considerable and sustained debate about the level of engagement in SAICM and the efforts being made to address this through multiple references in the text. A measure of whether this is being successful is needed. However, it is recognized that this indicator will not capture the engagement of the sectors and stakeholders in actually implementing sound chemicals and waste management activities.

Data custodian: SAICM Secretariat.

Disaggregation: by sector and stakeholder group as defined in the text¹¹; by meeting type (ICCM, bureau, regional meeting/region, gender, vulnerable groups etc).

Periodicity: published annually on the SAICM website.

Target E4- Financial and non-financial resources needed to achieve the sound management of chemicals [and waste] are identified and mobilized in all sectors by and for all stakeholders.

Funding mobilised by governments, industry, IGOs, and civil society through mainstreaming to promote the sound management of chemicals and waste

A key element of the beyond 2020 instrument is obtaining political awareness and raising the profile. A key indicator could therefore be level of funding provided for this work. In climate change, there are high profile commitments of funding (as an example, the OECD document: “2020 Projections of Climate Finance Towards the USD 100 Billion Goal”); can this be replicated for chemicals and waste.

The data could be compiled by the beyond 2020 secretariat following submissions from funds' providers. The indicator is not yet developed but could follow this methodology: The cumulative funds available from the GEF, the Special Programme and any other identified funding mechanisms could be easily put together. Then, where bilateral donors, industry or other partners' funding is reported, this can be added to the total. As this would be a way to promote what they are doing (funding), it can be expected that this would be forthcoming. The Quick Start Programme followed a similar approach.

¹¹ Sectors are understood to include, but not be limited to, agriculture, environment, health, education, finance, development, construction and labour.

Stakeholders include [but are not limited to] Governments, regional economic integration organizations, intergovernmental organizations, civil society, industries, businesses, the financial sector, development banks, academia, workers, retailers and individuals. (*compilation document arising from IP3*)

6. Information on links to other agendas

The following information includes information from materials referenced in earlier sections of this document as well as the thought starter *Strengthening the links between the biodiversity post-2020 framework with chemicals & waste*¹², submitted by UNEP to the Convention on Biological Diversity secretariat on the zero draft of the post-2020 global biodiversity framework. This information has not been extensively discussed by the Technical Working Group.

Why is it imperative to strengthen the links between chemicals and waste and the sustainable development agenda?

- The GCO II recognized that SAICM did not reach its objective. There is an urgency to strengthen the linkages between our common goals, as global sales in chemicals were worth approximately US dollars 3.5 trillion (excluding pharmaceuticals) in 2017 and **chemicals production is expected to double** in size between 2017 and 2030¹³.
- Enhancing the linkages between the different sectoral and development agendas will support synergies and increase the chance to reach the common goal of sustainable development. Agendas addressed in silos cannot succeed alone.
- Many sustainable development agenda items are closely linked, and sometimes driven by the **sound management of chemicals and waste**: it is the case of biodiversity for example. Pollution, including from unsound management of chemicals and waste, **is one of the key drivers threatening the planet's biodiversity**.
- The chemicals and waste beyond 2020 instrument will benefit from building on synergies with the rest of the sustainable development agendas, in particular the sustainable development goals (SDGs), as well as with other international instruments including the Chemical and Waste conventions and agreements (BRS, Minamata, Montreal), the ILO Conventions and the International Health Regulations (2005), and with other agendas such as the post-2020 biodiversity framework currently under development.

How to strengthen the links, within the context of the post 2020 instrument?

- The IOMC Indicators of Progress include a number of indicators established under other agendas that also contribute to SAICM and are proposed by the IOMC group for inclusion in the beyond 2020 indicators. Examples include the number of countries that have implemented pesticide legislation based on the FAO/WHO International Code of Conduct, achievement of the chemical core capacities under the International Health Regulations (IHR (2005)), and the number of parties to the BRS and Minamata Conventions. Some of these also link to the SDGs, i.e. in the case of the IHR, SDG indicator 3d, and in the case of the conventions, SDG indicator 12.4.1.
- Inclusion of these proposed indicators would emphasize linkages which could be highlighted in the indicator text in some way.
- In relation the 2030 Agenda, additional relevant existing targets or indicators also could be part of the new instrument, considering that they are already being monitored, that they have custodians and will be reported for the 2030 Agenda. Linkages could be drawn through the inclusion of targets or indicators in the beyond 2020 instrument, under existing objectives or through a new section for linking agendas.
- This approach can help enhance the understanding on how the different initiatives, instruments, organizations are contributing to the sound management of chemicals of waste beyond 2020, therefore

¹² UNEP (2020) *Strengthening the links between the biodiversity post-2020 framework with chemicals & waste*
<https://s3.amazonaws.com/cbdddocumentspublic-imagebucket-15w2zyxk3prl8/a426992b24d9968973e92a2878b5ad5f>

¹³ Global Chemical Outlook II

contributing to the new instrument vision. This does not constitute a duplication of efforts, on the contrary it can be very useful to reduce fragmentation and account for already existing processes that support a common vision.

- For example, the following could be brought to the beyond 2020 instrument:

Strategic Obj A – Target A5	SDG target 12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	Indicator 12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement	Tier I
Strategic Obj B – target B4	SDG target 4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	Indicator 4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment	Tier II

- Relevant existing indicators from other agendas could also support high-level indicators, if they are established, to ensure the instrument is making progress towards the vision and the objectives supporting the sound management of chemicals and waste, but also towards sustainable development.

- For example, the health impact indicator proposed by the IOMC group includes SDG 3.9.3.
- SDG 12.4 could also be included.

SDG – Goal 3	Target 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Indicators 3.9.3 Mortality rate attributed to unintentional poisoning	Tier I
SDG – Goal 12	Target 12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	Indicator 12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment	Tier II

Detailing linkages with the sustainable development agendas

➤ Sustainable Development Goals (SDGs)

Figure 4: Linkages between chemicals and waste and the SDGs (adapted from Inter-Organization Programme for the Sound Management of Chemicals (IOMC) 2018, p.3)



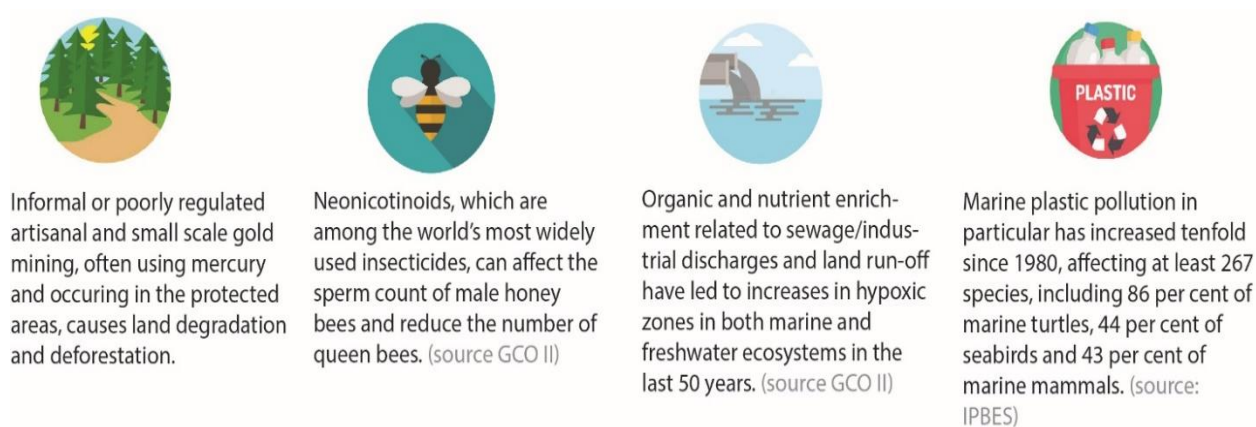
- The sound management of chemicals and waste is an enabler to many SDGs, starting with SDG 12 on sustainable consumption and production patterns, but going well beyond. While there are 196 targets and 230 indicators under the SDGs, around 69 targets and 91 related indicators are relevant to chemicals and waste. Most of these indicators are tier one, or tier two, e.g., a methodology has been established and a custodian designated. The approach of the SDGs, including by sector (such as agriculture and food, health, water, industry, energy) and by transversal approaches (such as education, gender, poverty, partnerships) makes them very relevant to the different sectors and approaches the chemicals and waste cluster is close to.
 - For example, the following could be of relevance and either used as such, or further disaggregated:

SDG Target 4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	Indicator 4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment	Tier II
SDG Target 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	Indicator 6.3.2 Proportion of bodies of water with good ambient water quality	Tier II

SDG Target 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Indicator 11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities	Tier II
SDG Target 12.2 By 2030, achieve the sustainable management and efficient use of natural resources	Indicators 12.2.1 Material footprint, material footprint per capita, and material footprint per GDP	Tier II
	12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	Tier I

➤ Biodiversity

Figure 5: The impacts of unsound management of chemicals and waste on biodiversity



- Pollution, to which unsound management of chemicals and waste largely contributes, is recognized by CBD Aichi Target 8 which aims to bring pollution to levels that are not detrimental to ecosystem function and biodiversity by 2020, and identified in the current target 4, in the draft of the co-chair of the biodiversity post 2020 framework, under discussion. Beyond these targets, preliminary analysis led to accounting around 22 generic indicators of the biodiversity Aichi targets, and 21 suggested elements of the targets for monitoring from the co-chairs' paper, as having some rationale in common with the chemicals and waste cluster. At the level of indicators commonalities are even higher. There is a strong potential to increase and better define common indicators.
 - For example, the following could be of relevance, from the Aichi target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity:
 - Trends in emissions, NOX
 - Trends in emissions, SOX
 - Trends in emissions, POPs
 - Trends in mercury emissions
 - Trends in pesticide use and related hazards
 - Index of Coastal Eutrophication (ICEP) and Floating Plastic debris Density (indicator for SDG target 14.1)
 - Mortality rate attributed to unintentional poisoning (indicator for SDG target 3.9)

- **The Basel, Rotterdam and Stockholm conventions** are multilateral environmental agreements, which share the common objective of protecting human health and the environment from hazardous chemicals and wastes. The Basel Convention focuses on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. The Rotterdam Convention covers the Prior Informed Consent Procedure for certain hazardous Chemicals and Pesticides in international trade. The Stockholm Convention focuses on the specific group of Persistent Organic Pollutants (POPs). They are legally binding instruments, covering specific groups chemicals and setting mandates for parties to those conventions. It is indispensable to build on the wealth of knowledge generated by these Conventions, create synergies and avoid duplication of some of the indicators, if they are covered by the obligations under the Conventions.
 - For example, the following could be of relevance:
 - trends in POPs emissions, that are available under the data warehouse of the Stockholm Convention; monitoring of changes in levels of each of the listed POPs in air, humans and other environmental media under the Convention's monitoring plan.
 - Number of parties with national hazardous waste management strategies or plans in place is monitored under the effectiveness evaluation of the Basel Convention.

- **The Minamata Convention** is a global treaty to protect human health and the environment from the adverse effects of a heavy metal: mercury. Proposed indicators for evaluating the effectiveness of the Minamata Convention are currently under discussion. Relevant ones could be used to support the beyond 2020 instrument.
 - For example, the following could be of relevance: Trends in mercury emissions, currently available under the UNEP Global Mercury Assessment; or Volume of mercury being traded, considered as part of the future effectiveness evaluation of the Convention. The Parties to the Minamata Convention have not yet agreed on their effectiveness evaluation framework, therefore it is important to see if and what type of linkages can be done by the time of the ICCM5 or of their relevance in the new framework.

- **The Montreal Protocol** is focused on Substances that Deplete the Ozone Layer. It regulates the production and consumption of nearly 100 man-made chemicals referred to as ozone depleting substances (ODS). Further analysis is needed for covering Montreal Protocol.

- **WHO International Health Regulations (IHR 2005)** are an international legal instrument that is binding on 196 countries across the globe, including all the Member States of WHO. The IHR core capacities are those required to detect, assess, notify and report events, and respond to public health risks and emergencies of national and international concern, as stipulated in Articles 5 and 13, and Annex 1, of the Regulations. The IHR monitoring process involves assessment of the development and implementation of eight core capacities at points of entry and for IHR-related hazards. These hazards may be biological (zoonotic, food safety and other infectious hazards), chemical, radiological or nuclear.
- **The FAO/WHO International Code of Conduct on Pesticide Management¹⁴** (therein referred to as the “Code of Conduct”) is a voluntary framework to guide government policy makers and regulators, the private sector, civil society, and other stakeholders on best practices in managing pesticides throughout their lifecycle. It provides voluntary standards of conduct on all pesticide uses, for all public and private entities engaged in or associated with the production, distribution, sale, use, regulation and management of pesticides, as well as the disposal of obsolete pesticides. It has been designed for use within the context of national and regional legislation as a basis to determine whether (proposed) pesticide-related actions constitute acceptable practices¹⁵.
- **The two ILO Conventions** that provide the basis for the sound management of all types of chemicals in the world of work are: **the Chemicals Convention, 1990 (No. 170)**; and **the Prevention of Major Industrial Accidents Convention, 1993 (No. 174)**. There are a number of other related and equally important Conventions covering specific risks and specific sectors, as well as ILO standards dealing with fundamental principles of OHS that provide a framework for risk management, including chemical risks¹⁶.

A focus on indicators

Benefits of using existing indicators, for **the chemicals and waste beyond 2020 instrument**, include:

- **Harmonizing with, capitalizing on and creating links to existing frameworks, and instruments, indicators, data collection methods**, e.g. Sustainable Development Goals, Aichi Target 8 (Annex 1), Chemical and waste conventions and agreements (BRS, , Minamata, Montreal), Code of Conduct on Pesticide Management, ILO Conventions and the IHR (2005).
- **Identifying pollutants/chemicals** that are relevant in other frameworks and supporting a synergetic action.
- **Take advantage of available data sources and existing methodologies** - demonstrate what is available (& possible to measure), where there are baselines and existing methodologies, and where there are gaps, e.g., existing regional and global data sources, e.g., existing global data sources such as the Global Mercury Assessment (GMA). The IOMC indicators and chemicals and waste MEA indicators have the considerable advantage of having in most cases methodologies and data sources already defined, sometimes with data history.
- **Having a determined a custodian** for each indicator or data source as well as a well-established methodology or the need for one to be able to track progress in a comparable manner.

¹⁴ <http://www.fao.org/agriculture/crops/thematic-sitemap/theme/pests/code/en/>

¹⁵ http://saicm.org/Portals/12/documents/meetings/IP4/INF/SAICM_IP4_INF_16.pdf

¹⁶ ILO (2019) The Sound Management of Chemicals and Waste in the World of Work https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/publication/wcms_731974.pdf

Appendix I

List of nominated experts of the Technical Working Group

The Technical Working Group was established with a balanced representation of regions, sectors (health, labour, agriculture and environment) and stakeholders. Experts were nominated by regional representatives through the fifth Session of the International Conference on Chemicals Management (ICCM5) Bureau. Below is the complete list of nominated experts.

	Name	Country / Organization
Co-chairs		
1.	Ms. Silvija Nora KALNINS	Latvia
2.	Mr. Wajira PALIPANE	Sri Lanka
Sectors		
3.	Ms. Anastasia SWEARINGEN	American Chemistry Council
4.	Ms. Servet GOREN	European Chemical Industry Council/ International Council of Chemical Associations
5.	Ms. Gharbi SAMIA	Association de l'éducation pour les futures generations
6.	Mr. Tadesse Amera SAHILU	Pesticides Action Nexus Association (PAN- Ethiopia)
7.	Mr. Rory O'Neill	International Trade Union Confederation (ITUC)
8.	Ms. Susan WILBURN	Health Care without Harm
9.	Ms. Hanna-Andrea ROTHER	University of Cape Town
IOMC Organizations		
10.	Ms. Jacqueline ALVAREZ	United Nations Environment Programme (UNEP)
11.	Mr. Oliver WOOTTON	United Nations Institute for Training and Research (UNITAR)
12.	Ms. Carolyn VICKERS	World Health Organisation (WHO)
13.	Ms. Manal AZZI	International Labor Organization (ILO)
14.	Ms. Beatrice.GRENIER	Food and Agriculture Organization (FAO)
Africa Region (AFR)		
15.	Mr. Sergemolly ALLOOALLOO	Gabon
16.	Dr. Oumar Diaoure CISSE	Mali
17.	Ms. Noluzuko GWAYI	South Africa
18.	Mr. Daniel NDIYO	Tanzania
Asia-Pacific Region (A-P)		
19.	Mr. Seyyed Mahdi PARSAEI	Iran
20.	Mr. Noriyuki SUZUKI	Japan
21.	Mr. Mohammed KHASHASHNEH	Jordan (Hashemite Kingdom of)
22.	Ms. Jing ZHAO	People's Republic of China
Central and Eastern European Region (CEE)		
23.	Ms. Liina TARKUS	Estonia
24.	Ms. Romana GRIZELI	Croatia
25.	Ms. Tatiana TUGUI	Moldova (Republic of)
26.	Ms. Suzana ANDONOVA	Republic of North Macedonia
Latin American & Caribbean Region (LAC)		
27.	Ms. Alejandra ACOSTA	Argentina
28.	Mr. André FRANCA	Brazil
29.	Mr. Ítalo Andrés Flamenco CORDOVA	El Salvador
30.	Mr. Franklyn CONNOR	St. Kitts and Nevis
Wester European Others Group (WEOG)		
31.	Ms. Hinni PAPPONEN	Finland
32.	Mr. Hans-Christian STOLZENBERG	Germany
33.	Mr. Audun HEGGELUND	Norway
34.	Ms. Laura NAZEF	United States of America

Appendix II

Compilation of the proposed High-level, high impact public messages by industry and NGO members of the Technical Working Group

The industry members of the Technical Working Group identified key public messages linked to the sound management of chemicals and waste to help communicate associated risks and benefits to human health and the environment and linked to the Strategic Objectives.

Proposed high-level, high impact public messages by industry members of the Technical Working Group

1. **Work together for the safe management of chemicals.**
2. **Universal adoption of GHS.** Link to objective A and to other objectives in particular to capacity building and partnerships.
3. **Science and risk-based chemical laws in every country.** Emphasizes the need for chemical management regulation in all countries as a core goal of SAICM.
4. **Safe operations with employees, safe society.** Specific focused on need for safe operations to benefit everyone.
5. **Easy access to chemical information for all.**
6. **No data, no market.** Emphasizes that no chemicals should go to the market with no adequate data.
7. **Sustainable use of chemicals provides benefits for all.** Emphasizes that chemicals must be used in a sustainable manner and when used properly they provide benefits for everyone.

The NGO members of the Technical Working Group identified key public messages linked to the sound management of chemicals and waste to help communicate associated risks and benefits to human health and the environment and linked to the Strategic Objectives. Additionally, the NGO members of the Technical Working Group identified related data indicators that are relevant to these messages, availability of this data and the link to the relevant (SDGs).

Message	SAICM indicators	Data sets	SDGs
Chemical pollution threatens people and our environment	A2 I1 (monitoring lead, HHPs, asbestos, single-use plastic, PFAS)) A2 I3 (monitoring EDCs, EPPPs, PM2.5) A2 I4 (monitoring contaminated sites)	Government, academic, and public interest NGO monitoring studies	3, 12, 16
Poison-free food	A1 I2 (HHP prohibitions) A1 I5 (implementing agroecological strategies) D1 I3 (companies that phase-out HHPs)	Government websites Government and NGO reports on agroecology Private sector reporting on HHP phase-outs	2, 3, 12
Lead-free kids for a healthy future	A1 I2 (prohibition) A2 I1 (monitoring) E5 I2 (closing gap)	Government websites or text of legal frameworks Public interest NGO monitoring of paint WHO report on country prohibitions of lead paint	3, 12
No data, no market	B6 I1 (Information all chemicals in commerce) A5 I2 (PRTR) B1 I4 (Disclosure of chemicals in products)	Government websites for laws and policies PRTR websites	9, 12, 16
Our children deserve a toxics-free future	A1 I1 (legal frameworks governing chemicals, pesticides and wastes) D5 I2 (eliminate or reduce the use of hazardous chemicals in design and manufacturing by 70%) D7 I2 (end fossil fuel subsidies)	Private sector reports Government reports on subsidies	9, 12, 13, 17
Business as usual is not an option	B6 I1 (Information all chemicals in commerce) D5 I1 (hazard reduction in design) C3 I3 (phase-out of highly hazardous pesticides)	Government websites Private sector reporting JMPM reports and private sector reporting	2, 3, 9, 12, 16
Toxics in = toxics out	D2 I4 (circular economy without toxic recycling) A1 I2 (prohibition of single use plastic) D2 I6 (eliminate incinerator and waste-burning subsidies)	Governments reports and websites of laws	9, 12

Identified existing, comprehensive data-sets from NGO constituencies that are available and relevant to track progress for the sound management of chemicals and waste¹⁷

Possible data sets and types of data for each objective are described below.

Strategic Objective A

- Government websites or text of legal frameworks
- Public interest NGO monitoring reports of Beyond 2020 implementation
- Public interest NGO monitoring of paint; asbestos bans; highly hazardous pesticides, plastics, and PFAS
- Public interest biomonitoring of mercury in hair
- Public interest monitoring of PM2.5, EDCs, and EPPPs
- Public interest monitoring and reports on contaminated sites
- Public interest monitoring of Basel Ban Amendment ratifications; Basel Convention website
- ILO website for ratifications of ILO conventions
- Government and NGO reports on illegal traffic
- Public interest NGO reports on the number of countries containing participants in national implementation committees of SAICM and of the Basel, Minamata, Rotterdam, and Stockholm Conventions
- Public interest reports on Convention implementation
- Public chemical footprint reports from companies
- Company reports on implementing Vienna recommendations on electronics
- Trade union assessments of occupational safety and health regulations; meaningful participation of workers; and evaluation of just transition policies
- PRTR websites

Strategic Objective B

- Reports to JMPM
- PRTR websites
- GHS implementation reports
- IOMC organization website
- WHO data on poison centres
- IOMC organization website for legacy lead paint guidance and inventory of available techniques in waste water treatment/water treatment plants for destroying pharmaceutical pollutants and PFAS
- Country reports on implementation of legacy lead paint; techniques to remove pharmaceutical pollutants and PFAS; national monitoring and education program on lead poisoning prevention; trainings on various topics
- Stockholm and Minamata Convention reports on contaminated sites
- IOMC report on global standards; public awareness-raising campaigns on chemical safety
- WHO and ILO data on incidence and mortality rate from diseases attributed to occupational risk factors
- IOMC organization report on assistance to farmers to enable them to discontinue the use of highly hazardous pesticides while maintaining their agricultural livelihood
- IOMC organization report guidance on safer alternatives to HHPs with priority to non-chemical alternatives and ecosystem approaches

Strategic Objective C

- Country reports on implementation of existing SAICM emerging policy issues and issues of concern; adopting and implementing the global transparency standard for chemicals of concern into national action plans; chemicals of global or regional concern from the global transparency standard that can no longer be

¹⁷ Extract from the NGO submission from the Technical Working Group homework. NGO full submission can be found in the Technical Working Group webpage.

<http://saicm.org/Beyond2020/TechnicalWorkingGroup/tabid/8287/language/en-US/Default.aspx>

legally marketed; non-essential uses for the chemicals of concern in the global transparency standard; procurement policies; HHPs phase-outs;

- Secretariat report on number of stakeholder assessments of implementation of issues of concern performed; number of issues of concern for which targets in the program of work were achieved; amount of funding made available to implement programmes of work for issues of concern as a proportion of funding needed; identification of chemicals of concern based on the prioritized intrinsic hazard properties; amount of dedicated funding in place for the creation of a global database for chemicals of concern; creation of the global database for chemicals of concern in specific product categories
- ICCA website on comprehensive information on adverse effects for all chemicals in commerce
- IOMC organization report on HHPs produced, imported, exported and used
- WHO data on reduction in pesticide-related suicides

Strategic Objective D

- Private sector reporting on safer substitutes implemented; lead pigment and paint phase-out; HHPs phase-out; CiP implementation; inventories of hazardous chemicals used in manufacturing processes; discharge of pharmaceuticals into the environment; reduction of manganese in fuel; elimination of metals and benzene in fuel; inventory of hazardous chemicals used in manufacturing processes; toxics-use reduction plans; products that are non-toxic; durable; reusable; easy to dismantle, repair and rebuild; minimally and appropriately packaged; recyclable and/or compostable; number of non-chemical solutions manufactured, emissions from energy consumption and production and reduction in occupational chemical exposures; implementation of benchmarking tools to assure hazard reduction and avoidance in the design; elimination or reduction of use of hazardous chemicals in design and manufacturing by 70%
- Country reports on private sector funding of recycling infrastructure; extended producer responsibility policies; waste audits and segregation of waste; circular economy/cradle to cradle systems without toxic chemical recycling; cost recovery instruments; elimination of government subsidies for waste to energy incinerators and cement kilns; zero waste city strategies; zero waste procurement practices; shift to non-combustion methods; removal and storage of obsolete pesticides; take back of used lead acid batteries; increase local markets by 50% so that the increase in agricultural production and productivity will translate into higher incomes; access to education, land, agricultural extension; number of hazardous chemicals imported, exported and produced on a yearly basis; ending fossil-fuel subsidies
- Financial institution reports on policies prohibiting financing of polluting facilities
- UN Working Group on Business and Human Rights reports that include chemicals and wastes percentage of companies with human rights due diligence procedures for toxic substances used, produced and released in their activities

Strategic Objective E

- Secretariat report on commitments to Beyond 2020 targets by IOMC organizations by UN organizations, financial institutions, ministers, CEOs, trade union leaders, health sector leaders, and public interest NGO leaders; report on the number of Ministerial Declarations and UN General Assembly resolutions on the Beyond 2020 chemicals agreement; inter-sectoral partnerships/networks with collaborative mechanisms in place, a programme of work, and reporting/evaluating their achievements; Number of intra-sectoral partnerships/networks with collaborative mechanisms in place, a programme of work, and reporting/evaluating their achievements; percent of total partnerships and amount funded by the private sector; number of financial needs assessments for Beyond 2020 implementation completed; amount of dedicated external financing, national mainstreaming and private sector cash financing as a proportion of funding needed for Beyond 2020 implementation; number of UN agency and government partnership agreements that are publicly available as a proportion of the total number and meet UN Guidelines; narrowing the gap
- Country reports on national development strategies containing sound management of chemicals and waste;
- Regional reports on development strategies that include policies and processes for the management of chemicals and waste