



Strategic Approach to International Chemicals Management

SAICM/OEWG.3/INF/6

Distr.: General 15 March 2019

Original: English

Open-ended Working Group of the International Conference on Chemicals Management
Third meeting
Montevideo, 2–4 April 2019
Item 4(b) of the provisional agenda*
Progress towards the achievement of the 2020 overall objective of the sound management of chemicals: Overall orientation and guidance towards the 2020 goal

Activities of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) to support Strategic Approach to International Chemicals Management (SAICM) Implementation

Note by the secretariat

The secretariat has the honour to circulate, in the annex to the present note, a report received from the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) on the activities to support the Strategic Approach to International Chemicals Management (SAICM) implementation. The report is presented in the annex as received from the IOMC and has not been edited by the secretariat.

^{*} SAICM/OEWG.3/1.

Annex



Activities of the IOMC to support SAICM Implementation February 2019

Prepared for the Third meeting of the Open-ended Working Group Montevideo, Uruguay, 2-4 April 2019

I. Background

1. The Inter-Organization Programme for the Sound Management of Chemicals (IOMC) was established in 1995 to strengthen cooperation and increase coordination among inter-governmental organizations in the field of chemical management. The IOMC currently comprises nine participating organizations: FAO, ILO, UNDP, UNEP, UNIDO, UNITAR, WHO, the World Bank, and OECD. The individual IOMC organizations have all endorsed or formally acknowledged support for SAICM, and their activities support the SAICM objectives as well as implementation of the Global Plan of Action, which identifies IOMC organizations as actors for eighty percent of its activities. These activities are formally coordinated by the IOMC, including through its bi-annual meetings. During these meetings, IOMC regularly holds discussions with the Secretariats of the Basel, Rotterdam and Stockholm Conventions, the Secretariat of the Minamata Convention, and the SAICM Secretariat.

II. New IOMC Activities and Resources since ICCM4

Response to the Overall Orientation and Guidance (OOG)

2. In response to the endorsement of the OOG at ICCM-4, the IOMC organizations, as well as the BRS Secretariat, IAEA, and UNECE, completed the implementation tables for the "Overall Orientation and Guidance for Achieving the 2020 Goal" (OOG) which provide detailed information regarding planned actions to implement the OOG and set out action points that will assist in the prioritization of SAICM implementation efforts towards 2020. It is available at https://www.who.int/iomc/saicm/en/.

SDGs and Agenda 2030

- 3. In 2018, the IOMC published a brochure entitled "Chemicals and Waste Management: Essential to achieving the Sustainable Development Goals (SDGs)" which highlights how sound chemicals and waste management are related to achieving all of the SDGs. Printed copies of this document are available during this meeting at the IOMC booth and it can also be accessed, along with an interactive version, at the IOMC website: www.iomc.info.
- 4. Also available at this meeting as INF document 15 is an updated version of the 2017 report "IOMC plans for future actions to implement the goals and targets of the 2030 Agenda" which focuses on future actions and policies beyond 2020 specifically linked to the SDGs and 2030, provides information from all Participating

Organizations regarding the main policies and actions they have or plan to undertake regarding sound chemicals and waste management in the context of the SDGs, and includes a chart mapping IOMC organizations chemicals and wastes activities against the 17 SDGs.

IOMC indicators of progress in implementing SAICM

5. Since being proposed at ICCM-4, the IOMC has compiled and provided data on eight IOMC indicators of progress in implementing SAICM, which are also being used in the current SAICM report on progress (SAICM/OEWG.3/INF/4) and the Global Chemicals Outlook-2 (GCO-II). For more information: https://www.who.int/iomc/indicators_saicm/en/.

IOMC Toolbox

6. The IOMC internet-based "Toolbox for Decision Making in Chemicals Management" has been updated with a new user interface which is now available and may be tested at the IOMC booth during this meeting. Use of the website by stakeholders is being supported by a series of national and regional training workshops during 2019 and 2020, as well as a series of webinars on the Toolbox including related toolkits and tools. For more information: https://iomctoolbox.oecd.org/.

IOMC Mercury Group

7. The participating organizations of the IOMC Mercury Group (ILO, UNDP, UN Environment, UNIDO, UNITAR, WHO, World Bank, and the OECD), as well as the Secretariat of the Minamata Convention and the GEF, continue activities intended to support the ratification and implementation of the Minamata Convention, involving close cooperation and coordination among these organizations. The broad range of activities includes: Minamata Convention Initial Assessments (MIAs), funded by the Global Environment Facility; support for developing National Action Plans on Artisanal and Small-scale Gold Mining (ASGM); and the development of guidance, hosting regional workshops, etc. For more information: https://www.who.int/iomc/asgm/en/.

Database of IOMC activities in countries

8. The database of IOMC activities in countries has been updated to provide an overview of where individual IOMC organizations are working on chemicals issues in countries. The entries relate to country-specific activities and not normative or general activities applicable to many countries, such as the development of guidelines. Information from the Secretariat of the Basel, Rotterdam and Stockholm Conventions is also included. The database is searchable by country or by IOMC organization and is available here: https://www.who.int/iomc/activity/poactivities/en/.

SAICM emerging issues

9. IOMC Participating Organizations have continued to act as leads for the various Emerging Policy Issues (EPIs) and other issues of concern. Reports on progress and additional information may be found in two related documents available at this meeting: SAICM/OEWG.3/6 and INF/9.

Inter-agency meetings on sound chemicals management

10. The *Inter-Agency Meetings on Sound Chemicals Management* were initiated by the IOMC in May 2016 and in follow-up to the UN EMG report "United Nations and Sound Chemicals Management: Coordinating delivery for member states and sustainable development". The purpose of the meetings is to provide an opportunity for direct dialogue between interested agencies and organisations and consider collaboration on the way forward towards the 2020 goal and beyond, in the context of the SDGs and the 2030 Agenda for Sustainable Development. Specific items are discussed in particular meetings, as needed. At the first meeting, agencies indicated the usefulness of meeting around one time per year, for purposes of coordination, sharing information, and obtaining feedback on new activities. To date, four Inter-agency meetings have been held in May and October 2016, March 2017, and November 2018. The most recent meeting brought together representatives from 13 agencies and secretariats, including a presentation by the UN Special Rapporteur on Human Rights and Toxics. Specific

discussions were held on: the interface between chemicals and wastes and implications for future work on sound chemicals management; input to and considerations on the SAICM intersessional process for "beyond 2020" and preparations for OEWG-3; and current issues in relation to international chemicals instruments, including the Basel, Rotterdam, Stockholm and Minamata Conventions, UNECE instruments and others, as well as insights from the draft 2nd Global Chemicals Outlook (GCO-II). For more information: https://www.who.int/iomc/Interagency_meetings/en/

III. Activities of the IOMC Participating Organizations in support of the SAICM Objectives

11. The following section provides summary information on activities since ICCM4 (September 2015), organized by SAICM objectives, received from FAO, ILO, UNDP, UNEP, UNIDO, UNITAR, WHO, World Bank, and OECD.

Food and Agriculture Organization of the United Nations (FAO)

The key area of FAO relating to chemicals management is the area of pesticide use in crop production, forestry, animal husbandry and food safety and the impacts of these chemicals on human health and the environment. In the context of SAICM, FAO works to provide guidance and technical assistance to countries in complying with international legal obligations such as those defined in the Basel, Rotterdam and Stockholm Conventions, and with best international practices in the regulation, management and use of pesticides in agriculture.

FAO's strategic programme integrates sustainable agricultural production with sustainable diets, conservation of natural resources, improvement of rural livelihoods and access to national and international markets. Pesticide management management in this context focuses on risk reduction through reduced reliance on and sound use of pesticides in agriculture, phasing out highly hazardous pesticides (HHPs) and promotion of non-chemical alternatives and other good agricultural/agroecological practices. With a substantial portfolio of projects that are funded by a diverse range of donors and financing institutions, FAO helps countries to develop capacity for risk reduction and promote sound management of pesticides through their lifecycle. FAO's technical divisions and the extensive network of FAO Regional, Sub-Regional and country offices also provide institutional and technical support.

FAO's work on agrochemicals management and risk reduction is backed by an extensive programme of setting international standards, preparation of technical guidance and development of tools to assist countries. FAO and WHO together recommend Maximum Residue Limits (MRLs) for pesticide residues in food, develop technical specifications for pesticide formulations to ensure product quality, and produce guidelines, training materials and tools to assist countries. The entire FAO pesticide management programme is framed by the International Code of Conduct on Pesticide Management, a voluntary agreement that outlines effective life cycle management of pesticides.

SAICM objective: Risk Reduction

A priority area of activities is reduction of risks from Highly Hazardous Pesticides (HHPs) that pose the greatest risks and cause most serious poisonings worldwide. HHPs are now an Emerging Policy Issue. Pesticide regulators are guided in identifying HHPs under their conditions of use and finding alternative pest management strategies that can replace the use of or reduce the risks from use of HHPs. Countries taking action on HHPs have been guided by the FAO Pesticide Registration Toolkit and specific guidelines developed jointly by FAO and WHO for this purpose (FAO/WHO Guidelines on Highly Hazardous Pesticides published in 2016). FAO is facilitating a fruitful, hands-on collaboration between national and international organizations, academia and civil society with the aim to build capacity and dialogue among countries, and to move from local to global action on HHPs. It has facilitated the elaboration of a number of HHP regional and national strategies especially in the African, Caribbean, Asia and Pacific (ACP) countries. Scaling up addressing HHPs globally will continue with the collaboration of IOMC POs including WHO, UNEP, UNDP, and UNIDO.

Integrated Pest Management (IPM) remains a key pesticide risk reduction strategy and is at the core of FAO's crop production and protection approach. In IPM, farmers are informed about ecological approaches to crop protection such that their reliance upon chemical pesticides is minimized and the selection of pest management tools is compatible with the ecosystem in which they are operating. As part of the activities on Fall Army Wall (FAW), FAO has developed a Guide on IPM of FAW through Farmer Field Schools in Africa (http://www.fao.org/fall-armyworm/faw-management/pesticide-guidance/en/). Last, with the 2nd international symposium on agroecology held in 2018, FAO is working to further scale up IPM and agroecological approaches, including development and use of non-chemical alternatives and other good agricultural practices.

SAICM objective: Knowledge and Information

Currently more than 40 technical guidelines in support of the International Code of Conduct on Pesticide Management are published and available on-line. Many are translated into UN languages. Recent publications include the Guidelines on HHPs, on pesticide legislation and on the registration of biological pest control agents. All technical standards for pesticide specifications and Maximum Residue Limits are published on-line as they are produced. http://www.fao.org/agriculture/crops/thematic-sitemap/theme/pests/code/list-guide-new/en/

The FAO Pesticide Registration Toolkit (www.fao.org/pesticide-registration-toolkit/tool/home/) launched in 2016 has been helping pesticide registrars in improving their decisions and in accessing relevant information. As of the end of 2018, more than 370 registration staff members in over 60 countries have been trained on the Toolkit

SAICM objective: Governance

The FAO/WHO International Code of Conduct on Pesticide Management provides a voluntary framework for effective life cycle management of pesticides. Legislation and regulation is the foundation of sound chemical management and this applies to pesticides too. Noting that pesticides are largely governed by Ministries of Agriculture or Health, it is vital to support inter-sectorial approaches to sound chemicals management. FAO, jointly with UNEP, hosts the Secretariat of the Rotterdam Convention which helps governments to control trade in certain hazardous chemicals and pesticides.

SAICM objective: Capacity Building and Technical Cooperation

FAO has been running programmes and technical cooperation projects on capacity building for pesticide management since the 1960s. It has become a unique body with offices and project support staff in every geographical region, and with strong expertise and broad knowledge of pesticide management that is applicable to chemical management in other sectors as well as in agriculture and health. Operational projects in January 2019 span more than 65 countries, and more are in development as others conclude their activities continuously. As one of the implementing agencies of the Global Environment Facility (GEF), FAO is supporting countries in implementing projects to address pesticide management, including POPs pesticides.

Training is offered on an ongoing basis on every aspect of FAO's work on pesticide management - more recently on pesticide registration and on HHPs - and on standard setting (e.g. MRLs), and collaboration with other agencies through IOMC expands opportunities for capacity development. FAO is also supporting a post-graduate Master programme on pesticide management at the University of Cape Town.

SAICM objective: Illegal International Traffic

Illegal trade in pesticides remains a serious, growing threat in the agricultural sector (risk problem with phytotoxicity, production crop losses, human health poisoning, environmental contamination, trade problem etc.), and is directly targeted by Articles 6 and 9 of the International Code of Conduct on Pesticide Management. It is critical to address this problem as it undermines the on-going efforts made to improve registration and to reduce HHPs. FAO works with countries to build capacity in every stage of the pesticide life cycle and will increase its focus on compliance and enforcement aspects. This includes effective inspections and import controls which are the most effective points to prevent illegal imports and trade in chemicals. Similarly, FAO, together with WHO, determine pesticide specifications which allow countries to test the quality of pesticides that are imported and traded in their territory. Effective and quality control measures identify counterfeit and substandard pesticides and allow countries to remove them from the market and prosecute offenders. The Rotterdam Convention secretariat supports parties in reducing risks in particular from pesticides through effective implementation of the Convention. Parties are enabled to take informed decisions on import of hazardous pesticides into their territory.

International Labour Organization (ILO)

The ILO Governing Body endorsed SAICM at its 297th Session (November 2006) and approved the follow-up activities proposed by the Office to implement SAICM objectives. This included active involvement by the ILO in the operations of the SAICM Quick Start Programme Trust Fund Implementation Committee, as well as supporting ILO-related activities in the SAICM's Global Plan of Action. ILO actively participates in Inter-agency meetings and is supportive of the dialogue and information sharing on the way forward towards the 2020 goal and beyond, in the context of the SDGs and the 2030 Agenda for Sustainable Development.

Recognizing that the protection of workers from the harmful effects of chemicals also enhances the protection of the general public and the environment, the ILO (through its Labour Administration, Labour Inspection and Occupational Safety and Health Branch - LABADMIN/OSH), focuses on assisting its 187 member States to implement the main ILO chemicals-related Conventions, namely the Chemicals Convention, 1990 (No. 170) and the Prevention of Major Industrial Accidents Convention, 1993 (No. 174). These two Conventions provide the basis for the sound management of chemicals at the workplace, as recognised by ICCM and SAICM.

Furthermore, implementation by member States of the Globally Harmonised System for the Classification and Labelling of Chemicals (GHS) remains a priority, as well as an important SAICM objective. The ILO, in collaboration with UNITAR, will continue to work through the UNITAR/ILO Global GHS Capacity Building Programme, to assist developing countries and countries with economies in transition to implement the GHS.

SAICM objective: Risk Reduction

In collaboration with WHO and the European Commission, ILO has developed a comprehensive database of International Chemical Safety Cards (ICSCs) intended to provide essential safety and health information on chemicals in a clear and concise way. To date, approximately 1700 cards are available and hosted in the ICSC database. The database is available in English, French, Spanish, Finnish, Hungarian, Japanese, Polish, Italian, Chinese and Russian. The ILO is dedicated to chemical risk reduction efforts through the promotion and regular update of the ICSC database.

Under the auspices of IOMC, the ILO assisted in the development of the IOMC toolbox. The Toolkit on occupational safety and health management systems for chemicals has been completed in collaboration with the OECD. The ILO led an IOMC Toolbox training to promote its use in risk reduction. In addition, the ILO will continue to review the existing Occupational Safety and Health Scheme, and will provide technical expertise to national and regional workshops on chemical safety management in the workplace when needed.

The ILO has developed and pilot tested several risk assessment tools for improving health and safety at the workplace, which includes safety in the use of chemicals. The Training package on workplace risk assessment and management for small and medium-sized enterprises (SMEs) and the 5 step guide for employers, workers and their representatives on conducting workplace risk assessments provide practical strategies towards the improvement of health and safety and the management of hazardous risks at the workplace. The ILO promotes these tools through various risk assessment training courses.

The ILO has various projects and initiatives that seek to foster the creation of a global culture of safety and health prevention, with the objective of achieving real reductions in the incidence of work-related death, injury and disease across global supply chains (GSCs). In particular, these projects aim to reduce and prevent OSH risks, including those related to hazardous chemical exposures, for workers in key sectors across GSCs – including agriculture (exposure to pesticides), textile and garment production (exposure to dyes), and manufacturing (exposure to paints, solvents and glues).

SAICM objective: Knowledge and Information

The ILO maintains a website dedicated to the topic of chemicals and the environment at https://www.ilo.org/safework/areasofwork/chemical-safety-and-the-environment/lang--en/index.htm. This website is regularly updated with key resources, including instructional material, resources lists, information on normative instruments, and information on relevant upcoming events. It furthermore contains links to information about SAICM and IOMC.

To support national SAICM implementation, the ILO has translated key guidance material prepared by UNITAR such as Guidance for Developing SAICM Implementation Plans, and has provided input into UNITARs document, National Implementation of SAICM: A Guide to Resource, Guidance and Training Materials of IOMC Participating Organizations.

The UNITAR/ILO Global GHS Capacity Building Programme provides guidance documents, and educational, awareness-raising, resource, and training materials regarding the GHS (http://www.unitar.org/cwm/ghs).

The ILO, in collaboration with its International Training Centre (ITC-ILO) and the International Commission on Occupational Health (ICOH) provides training on Chemical Safety in the framework of a Master's Program in Occupational Safety and Health.

The ILO, in collaboration with ITC-ILO will host a Knowledge Sharing Meeting on working conditions in Artisanal and Small Scale Gold Mining (ASGM) in the Philippines in May 2019 with the aims of promoting ILO legal standards related to the safe use of chemicals as well as the Minamata Convention.

SAICM objective: Governance

As an indication of support for the outcomes of ICCM, the Governing Body of the ILO endorsed the SAICM at its 297th Session and approved the follow-up activities proposed by the Office to implement the SAICM objectives. ILO actively participates in Inter-agency meetings and is supportive of the dialogue and information sharing on the way forward towards the 2020 goal and beyond, in the context of the SDGs and the 2030 Agenda for Sustainable Development.

The ILO promotes its numerous International labour standards and disseminates its codes of practice and guidelines on this topic. Focus is placed on assisting ILO's 187 member States to implement the main ILO chemicals-related Conventions, namely the Chemicals Convention, 1990 (No. 170) and its recommendation the Prevention of Major Industrial Accidents Convention, 1993 (No. 174). These two Conventions provide the basis for the sound management of chemicals at the workplace, as recognised by ICCM and SAICM. Other pertinent standards include: Asbestos Convention, 1986 (No. 162); Working Environment (Air Pollution, Noise and Vibration) Convention, 1977 (No. 148); Radiation Protection Convention, 1960 (No. 115); Benzene Recommendation, 1971 (No. 144); Occupational Cancer Convention, 1974 (No. 139); Labour Inspection (Agriculture) Convention, 1969 (No. 129); Safety and Health in Construction Convention, 1988 (No. 167); Safety and Health in Mines Convention, 1995 (No. 176); and the ILO List of Occupational Diseases, Recommendation (No. 194).

ILO activities have been implemented in line with paragraph 2b) of article 16, Article 7 and Annex C of the Minamata Convention. The ILO has promoted the ratification and implementation of ILO instruments relevant to mercury, including the Convention on Chemicals, 1990 (No.170) and the Convention on Safety and Health in Mines, 1995 (No. 176). This is in addition to the ILO List of Occupational Diseases which includes occupational diseases caused by mercury or its toxic compounds. There are a number of ongoing ILO projects related to mercury use in artisanal and small scale gold mining (ASGM), and also in the automobile dismantling sector. Various ILO projects are actively participating in NAPs to eliminate mercury, and producing guidance and research materials in collaboration with other stakeholders.

The ILO plans to develop new technical guidelines on chemical hazards, and to consolidate a number of chemical instruments including: Convention No.13 on white lead; Convention No.136 and Recommendation No.144 on benzene; Recommendation No.4 on lead poisoning; and Recommendation No.6 on white phosphorous; in the context of Convention No.170 and Recommendation No.177 on chemicals, as to be determined by the International labour Conference (ILC). The ILO will also be taking action for the promotion of the Asbestos Convention, 1986 (No. 162) concerning Safety in the Use of Asbestos and the Prevention of Major Industrial Accidents Convention, 1993 (No. 174).

The 4th ILO Standard Review Mechanism - Tripartite Working Group met in September 2018 and reviewed a number of OSH instruments, including the following two instruments directly relevant to chemical safety: the Safety and Health in Construction Convention, 1988 (No. 167) and its Recommendation No.175, and the Safety and Health in Mines Convention, 1995 (No. 176) and its Recommendation No.183.

SAICM objective: Capacity Building and Technical Cooperation

The ILO has produced a series of technical publications on E-waste to promote capacity building among its constituents and stakeholders to better tackle this issue. In addition the ILO has joined the new UN Coalition to Tackle Electronic Waste and promotes the implementation of its objectives. In April 2019, the ILO will host a high-level Forum to discuss current and emerging issues related to decent work in the management of the E-waste sector.

The ILO has initiated the process of formally joining the Global Alliance to Eliminate Lead Paint, in which it will leverage its unique tripartite structure to promote social dialogue towards the phase out of the manufacture and sale of lead paint.

ILO's Green Jobs programme promotes the "greening" of enterprises, workplace practices and the labour market as a whole. These efforts create decent employment opportunities, enhance resource efficiency and build low-carbon sustainable societies. Green jobs are defined as "decent jobs that contribute to preserve or restore the environment", be they in traditional sectors such as manufacturing and construction, or in new, emerging green sectors such as renewable energy and energy efficiency. Such jobs help to: improve energy and raw materials efficiency; limit greenhouse gas emissions; minimize waste and pollution; protect and restore ecosystems; and support adaptation to the effects of climate change.

The ILO is currently developing its strategic approach for engaging on a number of global issues of concern including lead in paint, chemicals in products (textile and garment supply chain), highly hazardous pesticides, and nanotechnologies and manufactured nanomaterials.

United Nations Development Programme (UNDP)

Within the framework of SAICM, UNDP advocates for the integration of sound chemicals management priorities into national environmental and poverty reduction planning frameworks. UNDP supports international chemicals conventions objectives and assists Parties to comply with agreed measures. In addition, UNDP helps countries to identify and access technical and financial resources to improve their chemicals and waste regimes. UNDP assists developing countries and countries with economies in transition to implement national and sector strategies that preserve the ozone layer while adopting low carbon emission technologies and safeguarding the global climate; supports partner countries in reducing POPs and mercury releases through the sound management of chemicals and hazardous waste in industry, health, energy and agriculture; and assists countries to develop capacity to access, combine and sequence various sources of environmental finance.

As one of the implementing agencies of the Global Environment Facility (GEF) as of January 2019, UNDP is supporting 37 countries in implementing forty-six projects to address Persistent Organic Pollutants, lead, and mercury with a combined portfolio of projects amounting to US\$ 164 million of grants provided by the GEF and co-financing of US\$ 643 million. UNDP supported activities have resulted so far in reducing risk of direct exposure to POPs for 2.5 million people and safely disposing of 18,203 tonnes of POPs.

UNDP also helps countries to meet their commitments under the Montreal Protocol on Substances that Deplete the Ozone Layer, phase-out HCFCs and introduce Ozone and Climate friendly alternatives with the financial support of the Multilateral Fund for the Implementation of the Montreal Protocol (MLF), the Global Environment Facility (GEF) and bi-lateral donors. Since 1992, UNDP has implemented 2,496 projects in 120 countries. UNDP's portfolio of ozone-related projects has a cumulative total value exceeding US\$ 829.6 million in grant funding and to date has prevented the release of over 70,000 tonnes of ozone depleting substances into the atmosphere.

SAICM objective: Risk Reduction

UNDP activities on chemicals, such as Persistent Organic Pollutants, Ozone Depleting Substances, and Mercury help reducing risks to environment and health.

UNDP supports the sound management, reduction, sound disposal, and elimination of all types of POPs contaminants (POPs pesticides, PCBs, unintentional POPs, etc.) included under the Stockholm Convention.

In the framework of the Montreal Protocol, UNDP helps countries to undertake investment activities in refrigeration, air conditioning, foams and solvents sectors to phase out the production and consumption of ozone-depleting substances thus reducing risks to human health and environment. Such activities also include the validation and demonstration of low carbon alternative technologies with zero ozone-depleting potential.

To protect public health and the global environment from the impacts of heavy metals, such as mercury and lead, UNDP is supporting countries through i) introduction of management schemes that support the waste aspects of obsolete equipment (including mercury waste stream), which arise when more environmentally friendly and energy efficient appliances are being introduced (e.g. as a result of refrigerator replacement programmes); and ii) introduction of Best Environmental Practices (BEP) and Best Available Technologies (BAT) to e-waste processing to avoid harmful releases of heavy metals and other hazardous substances.

SAICM objective: Knowledge and Information

UNDP maintains websites at http://www.undp.org/chemicals/ and http://www.undp.org/ozone/ where it provides information on its activities on chemicals management and about linkages between chemicals development and development. UNDP publications on chemicals, waste and ozone-depleting substances are also available through these websites and by following the link at:

 $\underline{http://www.undp.org/content/undp/en/home/library.html?start=0\&sort=date\&view=cards\&tag=topics:sustainable-development/Chemicals-and-waste-management\#$

SAICM objective: Governance

UNDP has been supporting the SAICM development process through participation and contributions to preparatory meetings as well as the ICCM. UNDP is a member of the SAICM Quick Start Programme Implementation Committee and the Executive Board. Furthermore, with SAICM adoption, UNDP realigned its

chemicals' programming to enhance its support to countries with SAICM implementation in order to adequately reflect SAICM priorities in its technical assistance strategy.

UNDP supports countries in the implementation of chemicals-related international agreements and Conventions on chemicals such as the Stockholm Convention on Persistent Organic Pollutants, Montreal Protocol on Substances that Deplete the Ozone Layer, and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

SAICM objective: Capacity Building and Technical Cooperation

UNDP's capacity building and mainstreaming approach follows guidance provided by UNDP Guide for Integration of Sound Management of Chemicals into Development Planning Processes which provides an explanation of the synergies that exist between SMC and development goals and suggests steps in determining national SMC capacity building needs/priorities and "points of entry" to facilitate the integration of SMC into national development plans and sector-based strategies.

Within its programmes under the implementation of the Stockholm Convention and the Montreal Protocol, UNDP endeavors to incorporate issues related to POPs and ODS management into national development planning processes, and its projects aim to improve policy and regulatory frameworks through targeted institutional capacity development.

Within the framework of Montreal Protocol and funded by the MLF, UNDP supports 22 countries with institutional strengthening projects, with focus on national ozone units.

SAICM objective: Illegal International Traffic

Within the framework of institutional strengthening projects funded by MLF, UNDP assists national ozone units to establish licensing systems for import and export of ozone-depleting substances (ODS) and undertake trainings for customs officials to prevent illegal trade in ODS.

UN Environment Programme (UNEP)

UN Environment is the authority on the environment and is mandated to keep the environment under review. Chemicals and waste are part of the environment and their sound management is a core mandate of UNEP. As such, UNEP activities contribute to the SAICM goal of sound management of chemicals and waste to protect human health and the environment from the harmful effects of chemicals and waste and catalyzes the links among chemicals and waste agenda with others such as the sustainable consumption and production agenda, circular economy, biodiversity, sustainable approaches and innovation. In addition, UN Environment hosts the SAICM secretariat and is providing support to the SAICM secretariat during intersessional meetings and sessions of the International Conference of Chemicals Management. The following paragraphs provide some examples of relevant UN Environment activities since ICCM4 that contribute to the SAICM objectives.

SAICM objective: Risk Reduction

Global Environment Facility (GEF) funded projects: UNEP has been working on projects that reduce risk from the harmful effects of hazardous chemicals and waste in countries with support from the GEF. These GEF projects include a) Elimination of lead in paint with support on the development of laws and work with the paint industry to comply with the law b) Inventory and elimination of PCB containing equipment c) Destruction of DDT obsolete stocks d) Management of mercury risks e) Management of chemicals in the textile industry f) Management of electronic waste g) Reduction of mercury use and emissions from the artisanal and small-scale gold mining sector h) Chemicals in products using life cycle thinking and approaches, as well as eco-innovation methodology and tools such as sustainable public and private procurement, to manage risks and reduce impacts in three value chains: buildings, electronics and toys. Key chemicals of concern are identified in these three sectors, and life cycle tools applied to get a better understanding of toxicity and other impacts from potential alternatives to harmful chemicals, using and improving USETox (the UNEP-SETAC Life Cycle Initiative toxicity model).

Eco-innovation: By implementing its Eco-innovation approach, UNEP supports companies in developing a new business model which promotes sustainability throughout the entire life cycle of a product, while also boosting a company's performance and competitiveness. It also supports countries in reviewing government policies to enable circularity and eco-innovation approaches, contributing to the innovative solutions, and enhancing the competitiveness of small and medium enterprises (SMEs), while at the same time contributing to SDG targets. In Jordan (2017-2018), through a project funded by SAICM Quick Start Programme, in partnership with the Royal Scientific Society, Jordan, UNEP supported finding alternatives for the replacement of identified hazardous chemicals in SMEs of the paint, fertilizers, drilling, and detergent sectors. The project helped reduce health risks for employees and consumers, and the environmental impacts associated with the handling and use of hazardous chemicals. These sustainability benefits are gained while supporting companies in identifying new market opportunities for their newly developed products, ensuring their competitiveness in the local and international markets, and complying with national and international regulations on the sound management of chemicals.

SAICM objective: Knowledge and Information

The Global Chemicals Outlook II (GCO II): The GCO-II is a key publication orchestrated by UNEP and seeks to alert policy-makers and other stakeholders to the critical role of the sound management of chemicals and waste in the context of sustainable development. The GCO-II features 10 key findings and 10 areas for action, identified based on the analysis in the five Parts. Part I: The evolving chemicals economy: status and trends relevant for sustainability; Part II: Where do we stand in achieving the 2020 goal – assessing overall progress and gaps; Part III: Advancing and sharing chemicals management tools and approaches; Part IV: Enabling policies and action to support innovative solutions; Part V: Scaling up collaborative action under the 2030 Agenda for Sustainable Development. GCO-II Documentations include a) Summary for Policymakers (UNEA-4 Working Document; being translated in all UN languages) b) Synthesis Report (to be launched at UNEA-4) c) Full GCO-II (to be available to the OEWG) c) 16 foundational papers (to be made available on the web).

An "Integrated Stockholm Convention toolkit to improve the transmission of information under Articles 07 and 15 of the Stockholm Convention" is a GEF funded project that aims to facilitate the development, transmission, access and use of data contained in national implementation plans and national report; , including through the development of an electronic template for the reporting of quantitative information contained in national implementation plans in a manner harmonized with the reporting under Article 15 of the Convention.

With the support of the GEF, UNEP is supporting **62** countries in their Minamata Initial Assessment (MIA) work where the UNEP mercury toolkit is used to provide an overview of the mercury emissions nationally and established priorities for action. In addition, **24** countries are supported by UNEP in the development of their National Action Plan (NAP) for the Artisanal and Small-Scale Gold Mining sector. UNEP supported the countries by developing a methodology for initial assessment of the use of mercury in the sector and is supporting the collection of information with a geographic representation tool, MAP-X.

The Chemicals and Health Branch contributed to the **Pollution and Health** report that provided evidence of chemicals and waste as pollutants and key policy recommendations.

Platform for SMC in SMEs. In collaboration with UNITAR, UNEP developed the Sound Management of Chemicals (SMC) in Small and Medium Sized Enterprises (SMEs) - Platform of tools and methodologies for SMC implementation (http://smctools-sme.unitar.org/). The Platform is an online system resulting from the feedback of an expert group formed by RECPnet members, SAICM representatives, ICCA, and UNIDO. The Platform has tools and methodologies to assist service providers working with SMEs in developing countries, to achieve the sound management of chemicals.

Assessing toxicity impacts along the life cycle of chemicals. The Life Cycle Initiative (https://www.lifecycleinitiative.org/, hosted by UNEP) fosters the development of the USEtox scientific consensus model (www.usetox.org) for the assessment of human and eco-toxicity in the context of Life Cycle Assessment. This model continues to be developed to enhance the assessment of alternatives to chemicals of concern with a holistic life cycle perspective, including all types of environmental impacts.

To advance work on **endocrine-disrupting chemicals**, UNEP organized two meetings back-to-back with the meetings of the conferences of the Parties to the Basel, Rotterdam and Stockholm conventions. They included a consultative meeting on endocrine-disrupting chemicals, held on 20 and 21 April 2017, followed by the fourth meeting of the UNEP Advisory Group on Endocrine-Disrupting Chemicals, held on 21 April 2017. Three reports have been launched, to share recent advances in science. (i)Worldwide initiatives to identify endocrine-disrupting chemicals and potential endocrine-disrupting chemicals; (ii) Review of existing national, regional and global regulatory frameworks that address endocrine-disrupting chemicals; (iii) Overview of the current knowledge on chemicals identified as endocrine-disrupting chemicals and selected potential endocrine-disrupting chemicals. The reports are posted on the UNEP website.

The International Environmental Technology Centre provided knowledge and technical support for development of **national- and municipal-level waste policies, strategies and action plans**. In partnership with Global Partnership on Waste Management, the Centre completed three assessments in 2017: (i) Global Mercury Waste assessment, (ii) Waste management in ASEAN Countries, (iii) Regional study on mercury waste management in the ASEAN countries. The Global Waste Management Outlook provided targeted regional and thematic reports. A thematic outlook for mountain region was published in December 2016. Regional waste management outlooks for Asia, Central Asia, and Latin America and the Caribbean were published in September 2017. Waste management outlook for Africa was published in Jun 2018 during the World Environment Day. An update to the Global Waste Management Outlook, published in 2015, is being planned for publication in 2019. The Centre also promoted 3R approach for waste management through development of waste management strategies and action plans at national and city levels.

SAICM objective: Governance

UNEP is supporting countries with establishing policies to adequately manage chemicals and wastes by establishing standard for total lead in paint, undertaking legislative reviews for the implementation of the Minamata Convention, establishment of Extended Producer Responsibility schemes for the management of end of life of electronic products. Under the GEF GOLD programme, UNEP will support countries in their formalization efforts of the sector.

The High Ambition Alliance on Chemicals and Waste was established in July 2018 with the aim to promote and ensure commitment to an ambitious new global deal to the sound management of chemicals and waste for beyond 2020. It is co-chaired by the Minister for the Environment, Sweden, and Minister for Housing, Land Planning and Environment, Uruguay. It is formed to raise the political profile of the benefits of tackling hazardous chemicals and waste and make it a more ambitious programme than it currently is. Furthermore, the Alliance recognizes the vast costs of inaction that, unchecked, will have direct impact on human health, the

environment and economic development. UNEP is part of the Alliance.

SAICM objective: Capacity Building and Technical Cooperation

The Special Programme to support institutional strengthening at the national level for the implementation of the Basel, Rotterdam and Stockholm Conventions, Minamata Convention and the Strategic Approach to International Chemicals Management (Special Programme): Established in September 2015, the Special Programme supports country-driven institutional strengthening at the national level, in the context of the integrated approach to address the financing of the sound management of chemicals and wastes, taking into account the national development strategies, plans and priorities of each country, to increase sustainable public institutional capacity for the sound management of chemicals and wastes throughout their life cycle. The Special Programme is one of two complementary elements of dedicated external financing under the integrated approach, with the GEF being the further element. Currently, there are forty-two (42) projects have been approved by the Executive Board in three rounds of applications amounting to approximately US\$ 11.5 million, selected on the basis of the project's merits, regional balance and priority to countries with least capacity, taking into account the special needs of least developed countries and small islands developing States.

The project Chemicals and Waste in the 2030 Agenda – Building capacity in SDG follow-up and review in developing countries to minimize chemicals and waste risks across sectors", funded by UN Development Account aims to enhance capacities in developing countries to collect data, monitor trends and identify related needs and action in support of evidence-based national decision-making and reporting under relevant international chemicals and waste agreements and the SDG global indicator framework. A global review of reporting requirements on chemicals and wastes, including reviewing the current status of MEAs and SAICM reporting, related gaps and identifying methodological issues, has been conducted.

UNEP in collaboration with the BRS secretariat is partnering with the private sector for pilot demonstration projects on **the environmentally sound management of waste lead acid batteries**.

To support Stockholm Convention Parties comply with the obligation arising from Article 7 of the Convention, UNEP executed two GEF projects entitled "Global project on the updating of National Implementation Plans for POPs" and "Global project on the updating of National Implementation Plans for POPs – add on to umbrella FSP project". These projects are assisting 34 countries from all UN regions to update and/or develop their national implementation plans (NIPs) and included a regional/global support component to provide technical expertise and tools to facilitate the updating of the NIPs and information exchange. One of the most important outcome of the projects global/regional component was the development of the document "From NIPs to implementation: Lessons learned report" reflecting experiences, good practices and lessons learned that will help the global community shape the future activities for Stockholm Convention effective implementation. Another major outcome of the projects global/regional component was compiling the available POPs quantitative data within the NIPs and the national reports and visualizing it on interactive maps created under MapX, as a support to the policy and decision-making processes.

Four GEF funded projects are being implemented in 42 countries in Africa, Asia, the Pacific Islands and in Latin America to strengthen the capacity for implementation of the **Persistent Organic Pollutants (POPs) Global Monitoring Plan of the Stockholm Convention** and to create the conditions for sustainable monitoring of POPs. These projects entitled "Continuing Regional Support for the POPS Global Monitoring Plan under the Stockholm Convention" aim at measuring the levels of POPs in air, water, human milk, matrices of national interests and enabling the generation of quality and comparable data in human and environmental concentrations of POPs for the effectiveness evaluation. The projects also contribute to capacity-building through conducting interlaboratory data comparison tests; providing training and guidance for sampling and analysis; strengthening capacity in existing laboratories to analyze core media; and assistance to establish long term programs as well as networking. In addition, the projects also aim to create the conditions for sustainable monitoring of POPs in the participating countries in the future. The outcomes will contribute to enhance the knowledge on potential exposure to POPs and the trends.

A project on the **global monitoring of mercury** has also recently been completed and resulted in a global interlaboratory assessment as well as the development of standard operating procedures for the media to be monitored under the Minamata Convention.

The "Analysis of Stakeholder Submissions on Sustainable Chemistry report contains a snapshot of initiatives and actions by stakeholders referring to sustainable chemistry, revealing its wide use; an analysis of submissions made by stakeholders, finding that stakeholder perceptions illustrate that sustainable chemistry plays a key role in achieving target 12.4 as well as other SDGs and targets not directly linked to chemicals and waste; and an analysis of findings from a survey undertaken by UN Environment to elicit feedback on the sustainable chemistry concept, revealing a holistic understanding of the concept. The report concludes that sustainable chemistry is seen by stakeholders as an important component to achieve the sound management of chemicals and waste and is therefore relevant for the discussions on chemicals and waste management beyond 2020. A practical starting point could be to develop a better understanding of sustainable chemistry opportunities globally.

Eco-innovation and Responsible Production trainings and implementation are supported by the UNIDO-UNEP **Resource efficiency and cleaner Production network (RECP Net).** The capacity of the network of partners in more than 60 countries, is being built through trainings and joint implementation using the following tools: Eco-innovation manual, the Responsible Production handbook for building the capacity of companies to improve their management of chemical hazards.

Integrated Health and Environment Observatories and Legal and Institutional Strengthening for the Sound Management of Chemicals in Africa (African ChemObs).: This GEF funded project is part of the implementation of the Libreville Declaration on Health and Environment in Africa. It provides a prototype of national integrated health and environment chemicals observatory, including a core set of indicators that will enable data aggregation at national, regional and global levels, to provide timely and evidence-based information to better predict, prevent and reduce chemicals risks to human health and the environment. The project, that entered into its full phase in 2018 to be rolled out until 2022, plans for the development of an integrated health and environment Observatory (ChemObs) for sound management of chemicals in nine African countries (Ethiopia, Gabon, Kenya, Madagascar, Mali, Senegal, Tanzania, Zambia, Zimbabwe) by 2022.

Guidev guidance documents to support countries to establish or improve their legal framework for chemicals control and its enforcement

As a follow up to the LIRA guidance and to further support countries in taking actions in strengthening national legislation and institutional structures in establishing chemicals control, UNEP in collaboration with the Swedish Government will launch at the SAICM OEWG four complementary documents to the LIRA guidance. They are primarily intended for government officials working to implement the safe management of chemicals. The four draft documents are: a) An information document to provide to the reader with information about the role of chemicals control in the life cycle of chemicals and to provide the arguments for taking actions to establish chemicals control legislation with defined responsibilities; and b) Three guidance documents, namely:

- i) National Authority for Chemicals Control: Guidance on the institutional capacity and structure and its funding
- ii) Risk reduction elements in Chemicals Control: Guidance on tools and on data that can be used
- iii) Enforcement of Chemicals Control Legislation: Description of inspection methodology linked to chemicals control.

United Nations Industrial Development Organization (UNIDO)

The UNIDO work, support and interventions on chemicals and waste should be seen in the overall context of advancing the Circular Economy. Much of the thrust is on resource efficiency and developing recycling industries at country level.

The UNIDO contribution to Chemicals and Waste Management is guided by Inclusive and Sustainable Industrial Development (ISID) approaches and is in line with key Sustainable Development Goals, particularly SDG 9 on Industry, Innovation and Infrastructure; SDG 8 on Decent Work and Economic Growth, as well as SDGs 11 and 12 on Sustainable Cities and Communities and responsible Consumption and Production, respectively. Developments of recycling industries stand at an important nexus for fulfilling these SDGs.

UNIDO is implementing a number of programmes that promote clean technologies and/or the preventive approach: the Resource Efficient and Cleaner Production (RECP) Programme, the Montreal Protocol Programme, the Transfer of Environmentally Sound Technologies (TEST) approach, Chemical Leasing, Corporate Social Responsibility (CSR) based on the implementation of a Triple-Bottom Line (TBL) approach, Environmental Management Systems (EMS), the elimination of Persistent Organic Pollutants (POPs), better management of Mercury, sector-specific programmes for the reduction of process wastes and pollution.

The Global RECP Programme, through the application of the RECP methodology, contributes to building capacity and implementing sound management practices at company level.

The Resource Efficient and Cleaner Production Programme strategy focuses on four thematic priorities, one of which is Cleaner Production and environmental sound management of hazardous substances and waste, including chemical leasing, chemicals safety and risk assessment. Within this priority area a new global programme for innovative approaches to environmentally sound management of chemicals and chemicals waste is being promoted.

UNIDOs Stockholm Convention Program, largely funded by the Global Environment Facility, is actively reducing risks, increasing the capacity as well as developing chemicals governance in around 35 countries across all regions. The volume of this technical assistance delivery is nearly US \$ 20 million per year.

Similar support is implemented on Minamata Convention on Mercury. UNIDO is also implementing many projects in the area of reducing mercury risks from artisanal gold mining, including in Burkina Faso, Colombia, Ecuador Mali, Peru, the Philippines and Senegal.

In addition, UNIDO enjoys a high reputation in assisting countries in eliminating Ozone Depleting Substances under the Montreal Protocol.

United Nations Institute for Training and Research (UNITAR)

UNITAR's Chemicals and Waste Management Programme supports capacity building in developing and transition countries in a wide range of chemicals and waste related areas to protect human health and the environment, often in collaboration with other IOMC POs and key partners. This support includes: (i) infrastructure and capacity assessments (e.g. National Profiles, Global Harmonized System of Classification and Labelling of Chemicals (GHS) situation analyses); (ii) implementation of Multilateral Environmental Agreements, such as the development of enabling activities and socio-economic studies on POPs and mercury, and training and capacity building on waste management including PCBs and e-waste; (iii) specialized training and capacity building (e.g. GHS, pollutant release and transfer registers (PRTRs), nanotechnology and manufactured nanomaterials); and (iv) international chemicals management and the Beyond 2020 process, for example, organization of workshops on goals and targets for chemicals and waste management and international governance.

SAICM objective: Risk Reduction

UNITAR supports more than 30 developing and transition countries to prepare their Mercury Initial Assessments (MIAs) and the National Action Plans (NAPs) on Artisanal Small Scale Gold Mining (ASGM). As part of the MIAs, UNITAR provides training on the development of mercury emissions inventories using UNEP's Toolkit for Identification and Quantification of Mercury Releases. UNITAR is also leading the updating of the Toolkit.

UNITAR also supports countries in implementing the GHS (addressing GHS situation and gap analyses, GHS implementation strategies, GHS legislation, and training and awareness-raising for all stakeholders), which contributes to minimizing risks to human health and the environment through improved hazard communication. From ICCM4 to date, UNITAR has assisted seven countries to implement the GHS system.

UNITAR provides technical support and training for GEF-funded projects to promote BAT/BEP to reduce unintentionally produced POPs from open burning of waste in the SADC region and the Gambia.

SAICM objective: Knowledge and Information

The National Profile Homepage (<u>www.unitar.org/cwm/nphomepage</u>) provides a global collection of National Profiles, including those prepared/updated within the SAICM framework.

The UNITAR/ILO Global GHS Capacity Building Programme provides guidance and training material on the GHS (https://www.unitar.org/cwm/ghs), including an e-learning course.

UNITAR provides support to countries to design PRTRs at the national and regional levels. PRTRs provide information on pollution to governments, communities, and the public, thereby supporting the "right to know" principle. UNITAR provides technical assistance, guidance and reference materials, and support for country-based activities, including development of POPs release inventories. In addition, UNITAR's PRTR:Learn (http://prtr.unitar.org) provides an interactive platform for sharing insights, information, knowledge, training modules, and resources on PRTRs.

In collaboration with UNEP, UNITAR has also developed the Mercury Platform (http://mercury.unitar.org), which shares insights, information, knowledge, and resources on mercury management. The Platform includes Mercury: Learn, which provides online training modules on developing mercury releases inventories, based on UNEP's Toolkit.

With Swiss support and in close cooperation with the Minamata and BRS Secretariats, UNITAR launched the Chemicals and Waste Platform in 2018, to share lessons learned and learning modules that will assist national mercury management teams to better understand the sound management of chemicals and how existing information and materials can be used to support implementation of the Minamata Convention (https://unitar.org/cwm/chemicals-and-waste-platform).

SAICM objective: Governance

Over the past 12 years, UNITAR has developed and tested a wide range of guidance materials, in collaboration with a diverse range of countries, IOMC POs, and other partners. These address many of the QSP strategic

priorities to support enabling activities at the national level (outlined in ICCM Resolution 1/4).

UNITAR, in coordination with the IOMC, participates in SAICM Beyond 2020 meetings and numerous regional SAICM workshops. In 2016, UNITAR, in close cooperation with UN Environment, organized a workshop on Chemicals and Waste and the SDGs. In 2018, in cooperation with UN Environment, UNITAR organized a lessons learned workshop on the Biodiversity Aichi targets, which provided some suggestions and good practices to be considered during the Beyond 2020 process. Similarly, in February 2019, UNITAR in cooperation with UN Environment and with German and Swiss support, will organize a workshop to discuss options for institutional arrangements and overall governance of the new framework for the sound management of chemicals and waste beyond 2020. This workshop will provide suggestions to be considered by the Open-Ended Working Group at its third meeting in April 2019.

UNITAR also supports countries to implement international chemicals and waste related agreements through QSP projects as well as by serving as an international executing agency for GEF-funded projects on Stockholm and Minamata Conventions implementation.

SAICM objective: Capacity Building and Technical Cooperation

UNITAR has served as the international executing agency for more than 70 projects supported by the QSP Trust Fund.

UNITAR also embarked with partners such as OECD, and within the framework of the IOMC, to raise awareness about nanotechnology and manufactured nanomaterials, including the implications for developing and transition countries as nano-based or nano-containing products are traded across borders. Activities commenced with a series of regional awareness-raising workshops for all developing and transition countries between 2009 and 2011. In 2011-2012, UNITAR, with the support of the Government of Switzerland, supported three pilot projects to assist developing and transition countries to develop programmatic capacities to address nanosafety issues at the national level. Additionally, from 2015 to 2018, UNITAR organized sub-regional workshops on nanotechnologies and manufactured nanomaterials. Three additional national pilot projects were fully implemented in 2018, also with financial support from the Government of Switzerland.

UNITAR, in close collaboration with UN Environment, also recently developed key publications to support the development and implementation of NAPs on ASGM under the Minamata Convention: (i) The Handbook for Developing National ASGM Formalization Strategies within National Action Plans (http://mercury.unitar.org/site/document/1438); and (ii) the Mobile data collection tool for national ASGM overview (http://mercury.unitar.org/site/document/1438); and (ii) the Mobile data collection tool for national ASGM overview (http://mercury.unitar.org/site/document/1401). In 2018, UNITAR also developed the Socio-Economic ASGM Research Methodology (https://www.unitar.org/sites/default/files/uploads/cwm/final_socio-economic_methodology.pdf).

SAICM objective: Illegal International Traffic

UNITAR has begun an EU-funded project, in close cooperation with UN University and other key partners, to reinforce operational activities and capacities of authorities involved in the fight against illegal trade and management of waste. This will be achieved through the development of practical tools and methodologies and implementation of capacity building activities for enforcement officers to prevent illegal traffic in Europe and Asia-Pacific.

World Health Organization (WHO)

The following paragraphs provide some examples of relevant WHO activities since ICCM4. Readers are also referred to OEWG3 documents on the SAICM emerging policy issues, and the Information Document submitted by WHO on the Chemicals Road Map and Global Chemicals and Health Network.

SAICM objectives: Risk Reduction and Knowledge and Information

Examples of guidance materials, chemical risk assessments and risk assessment methodologies published by WHO since ICCM4 follow.

2018 Data addendum for 2016, Public health impact of chemicals: knowns and unknowns https://www.who.int/ipcs/publications/chemicals-public-health-impact/en/

Chemical releases caused by natural hazard events and disasters: information for public authorities was published along with brochures on Chemical releases caused by earthquakes, Chemical releases caused by floods, and Chemical releases caused by cyclones. https://www.who.int/ipcs/publications/natech/en/

Generic risk assessment models for vector control products,

https://www.who.int/neglected_diseases/resources/WHOPES/en/

Use of malathion for vector control. http://apps.who.int/iris/bitstream/10665/207475/1/9789241510578_eng.pdf

Recycling used lead-acid batteries: health considerations, along with brief information for the health sector http://www.who.int/ipcs/publications/ulab/en/

Each year WHO updates its materials on lead paint and lead poisoning for the International Lead Poisoning Prevention Week. WHO and partners also publish a report on lead week. https://www.who.int/ipcs/lead_campaign/en/

Documents on ASGM and health and Step-by-step guidance on phasing out mercury thermometers and sphygmomanometers were translated into French and Spanish. http://www.who.int/ipcs/assessment/public health/mercury/en/

WHO work on the International Chemical Safety Cards (ICSCs) continues to be a major point of collaboration with the International Labour Organization (ILO). ICSCs are available for approximately 1700 chemicals in multiple languages, disseminated via a web-based interface (https://www.ilo.org/dyn/icsc/showcard.listCards3). GHS classifications continue to be made for new and updated ICSCs. The corresponding hazard statements, signal words and symbols are included on the ICSCs. To date, GHS classifications have been included on 633 ICSCs.

WHO commissioned a State-of-the-Science Review of Mercury Biomarkers in Human Populations Worldwide between 2000 and 2018, which was published in the scientific literature and formed the basis for a chapter in UNEP's Global Mercury Outlook. https://ehp.niehs.nih.gov/doi/full/10.1289/EHP3904

Recent evaluations of the FAO/WHO Joint Expert Committee on Food Additives http://www.who.int/foodsafety/chem/jecfa/publications/en/index.html

Recent evaluations of the FAO/WHO Joint Meeting on Pesticide Residues are available at http://www.who.int/foodsafety/chem/jmpr/publications/en/index.html

Recent evaluations of the International Agency for Research on Cancer (IARC) can be accessed at: http://monographs.iarc.fr/

WHO continues to update guidelines in chemicals in drinking water and air quality guidelines.

SAICM objective: Governance

The World Health Assembly (2017) approved the Road map to enhance health sector engagement in the Strategic Approach to International Chemicals Management towards the 2020 goal and beyond. http://www.who.int/ipcs/saicm/roadmap/en/

WHO held Sessions on the WHO Chemicals Road Map at SAICM Regional Meetings, January – February 2018. Report: https://apps.who.int/iris/bitstream/handle/10665/279903/WHO-CED-PHE-EPE-18.07-eng.pdf

Global Health Observatory information on the status of regulations and controls on lead paint is regularly updated. http://www.who.int/gho/phe/chemical_safety/lead_paint_regulations/en/

WHO submitted report to Minamata COP1 and 2 on cooperation with WHO http://www.mercuryconvention.org/Portals/11/documents/meetings/COP2/English/2 12 e WHO-ILO.pdf

SAICM objective: Capacity Building and Technical Cooperation

A Chemicals Road Map Workbook was produced to support countries and other stakeholders to prioritize and plan implementation of road map activities https://apps.who.int/iris/bitstream/handle/10665/273136/9789241513630-eng.pdf?ua=1

As at the end of 2018 there were 85 institutions in the WHO Chemical Risk Assessment Network from 49 countries. http://www.who.int/ipcs/network/en/

A Strategic Plan for enhancing chemical risk assessment capacity 2018-2020 was published and a number of activities implemented. https://www.who.int/ipcs/network/Network_Capacity_Building_Strategy.pdf

Numerous capacitiy building events have been held. Two recent examples are an International Training Course on Environmental and Health Risk Assessment and Management of Toxic Chemicals, 7–18 December 2018, Bangkok, Thailand, and a National Training workshop to Enhance the Health Sector Role in the Management of Chemicals, 17-19 December 2018, Cairo, Egypt.

A series of regional workshops for ministries of health were held to support health implementation of the Miinamata Convention on Mercury, and the outcomes published. https://www.who.int/ipcs/assessment/public_health/publication/en/

WHO continued to support Member States in prevention, preparedness, surveillance and response to (suspected) chemical incidents.

A workshop on identification of emerging risks to health from chemicals is scheduled for 20-21 February, to develop collaborative activities on this issue under the WHO Chemical Risk Assessment Network.

WHO participated in the execution of a number of QSP and GEF projects, for example on poisons centres, ASGM, and health care waste management.

World Bank

The World Bank has a large project portfolio related to pollution management and environmental health that covers a number of activities with linkages to the SAICM, including POPs, pesticides management, and hazardous waste. In addition, the World Bank Group has a strong portfolio of active projects, with chemicals and waste management components, that is also of direct relevance.

Over the past 12 years, FY04–17, the World Bank Group approved 534 pollution-relevant activities, accounting for approximately US\$43 billion in commitments. These projects have contributed significantly resulting in easing contamination on land and in rivers and air pollution reductions in numerous countries including Argentina, Bangladesh, China, Egypt, Ethiopia, India, Lebanon, Morocco, Mexico, Mongolia, Peru, and Vietnam.

Over the last several years, stakeholders across low and middle-income countries have expressed an urgent need for increased support on pollution management in order to respond to the magnitude of the threat to human health and economies. Responding to pollution is a challenge that is solvable in the near term to save lives and unlock economic opportunity through action at the local, national, regional and global levels.

Some specific World Bank activities related to the objectives of the Strategic Approach are highlighted in the table here below.

SAICM objective: Risk Reduction

The World Bank Group has been active in public and private sector pollution management for several decades. Between 2004 and 2017, the World Bank Group implemented 534 projects, with a total commitment of US\$ 43 billion, that directly targeted pollution management. Projects have improved the management of solid and hazardous waste and wastewater and helped control pollution related to transport, industry, energy, mining, and other sectors across many countries. For example, in Zambia, a Bank loan is assisting the Government to reduce environmental health risks to the local population in critically polluted mining areas in Chingola, Kabwe, Kitwe, and Mufulira municipalities, including lead exposure in Kabwe municipality. In Morocco, the World Bank has supported the modernization of waste management, including at sites like Oum Azza, near Rabat, where traditional trash-pickers now operate a recycling collective in improved conditions. In Africa, a \$25 million program has removed over 3,000 tons of obsolete and dangerous pesticides from close to 900 contaminated sites in Ethiopia, Mali, Tanzania, Tunisia, and South Africa. As an Implementing Agency of the Global Environment Facility, the Bank relies on its comparative advantage for investments to bring about on-the-ground risk reduction. The World Bank's POPs portfolio addresses the closure of production of toxic chemicals, identification and promotion of alternative technologies and practices, investments in Best Available Techniques/Best Environmental Practices, and environmentally sound destruction of toxic stockpiles and wastes.

Moreover, sound chemicals management can be achieved through World Bank projects as a byproduct of a project's primary objectives. Though not quantified, these opportunities constitute a strong potential for synergies and mainstreaming chemicals management in Bank operations that can be explored and expanded based on client country priorities.

SAICM objective: Knowledge and Information

The World Bank Group keeps a wealth of information available to the general public through its websites. The Bank's websites on Pollution Management and Environmental Health, on Getting to Green - A Sourcebook of Pollution Management Policy Tools for Growth and Competitiveness; and on Reducing Pollution include information about its strategy, portfolio, and pipeline on hazardous waste management. In addition, the Environmental Health and Safety Guidelines available on the website of the International Finance Corporation, include industry sector-specific guidelines. Other products generated by the World Bank are available in hard and soft copies for all interested stakeholders.

SAICM objective: Governance

As an Implementing Agency of the Global Environment Facility and of the Multilateral Fund for the Implementation of the Montreal Protocol, the World Bank works with developing countries and countries with economies in transition to carry out the investments and build capacities for meeting their obligations under international environmental treaties.

Moreover, the Bank's Environmental and Social Framework (ESF) includes environmental and social standards include requirements on environmental assessment used to examine environmental risks and benefits associated with all Bank investments. The ESF requires that not only national legislation is taken into account but also a country's obligations under relevant international environmental treaties and agreements, including for example the Basel, Rotterdam, Stockholm, and Minamata Conventions and the Montreal Protocol.

SAICM objective: Capacity Building and Technical Cooperation

The World Bank Group views capacity building and technical assistance as an integral part of its work that is integrated into risk reduction investments highlighted above. Capacity building is, in fact, an indispensable element of project interventions in all international development fields. In the Chemicals-related field, all Bank-implemented projects seek to build capacity to ensure that regulation and enforcement capabilities are in place and to ensure the long-term sustainability of efforts. As an example, In Belarus, the Bank worked with the Ministry of Natural Resources and Environmental Protection to develop its capacity to treat and dispose of hazardous waste. The Bank supported a massive cleanup operation at the Slonim burial site, which excavated and disposed of up to 1,750 tons of toxic obsolete pesticides.

Of direct relevance to the SAICM, the Bank promotes approaches where client countries can build the foundations for long-term capacity for chemicals management while working to implement the Stockholm Convention on Persistent Organic Pollutants.

SAICM objective: Illegal International Traffic

The bulk of activities carried out by the Bank in this context relate to the control of illegal trade of Ozone Depleting Substances in the context of the Montreal Protocol. The Bank has also initiated work more recently on international trafficking of wildlife with the creation of the International Consortium to Combat Wildlife Crime in collaboration with CITES and others and has a growing series of investments with client countries on customs modernization and trade. The World Bank Group's Environment and International Law Unit provides advisory support and expertise on environmental compliance and enforcement issues.

Organization for Economic Cooperation and Development (OECD)

In order to facilitate its global reach, the OECD aligns its work closely with other international efforts especially the IOMC. Its 2017-2020 four-year work programme for the overall Chemicals Programme in OECD was organised around the objectives of SAICM: www.oecd.org/chemicalsafety.

SAICM objective: Risk Reduction

OECD has continued to populate its Substitution and Alternatives Assessment Toolbox (see http://www.oecdsaatoolbox.org/) especially with a library of case studies. A comparative study of activities on substitution and alternative assessment in a number of countries will be released in 2019 (see http://www.oecd.org/chemicalsafety/testing/substitution-of-hazardous-chemicals.htm).

On sustainable chemistry, the OECD released a report on the economic features of chemicals leasing, which received a silver award at the at the 2018 Global Chemical Leasing Awards (see http://www.oecd.org/env/ehs/risk-management/sustainablechemistry.htm)

The OECD/UNEP Global Perfluorinated Chemicals (PFC) Group has focused on organizing a series of webinars to raise awareness of risk reduction measures in countries as well as on the availability of alternatives to per and polyfluorinates alkyl substances (PFAS). The group also released an updated list of PFAS in 2018 (see http://www.oecd.org/chemicalsafety/portal-perfluorinated-chemicals/)

SAICM objective: Knowledge and Information

The OECD continually updates and improves its QSAR Toolbox, a free software application intended to be used by member countries, the chemical industry and other stakeholders in filling gaps in (eco)toxicity data needed for assessing the hazards of chemicals. The latest version (4.2) was released in 2018 (http://www.oecd.org/chemicalsafety/risk-assessment/oecd-qsar-toolbox.htm).

In 2018, the OECD also released its first document on considerations for assessing the risks from the combined exposure to multiple chemicals. The report outlines the technical aspects of the various approaches and methodologies available with respect to the assessment of risks from combined exposures to multiple chemicals. The document draws from approaches applied and experience gained in the regulatory context (see http://www.oecd.org/chemicalsafety/risk-assessment/)

The objective of OECD's work on exposure assessment is to develop harmonised tools for assessing the exposure of chemicals to humans and the environment. In 2018, the OECD published a Product Release and Exposure Data Warehouse with data on releases of chemicals from, and exposures to, commercial and consumer end products (see http://www.oecd.org/chemicalsafety/risk-assessment/product-release-and-exposure-data-warehouse.htm).

Since ICCM4, the OECD released a number of guidance documents on core elements for setting up and implementing Pollutant Release and Transfer Registers (see http://www.oecd.org/chemicalsafety/pollutant-release-transfer-register/)

The OECD work on the safety of manufactured nanomaterials aims to promote international co-operation in human health and environmental safety related issues around manufactured nanomaterials, within the context of the industrial chemicals sector, in order to assist countries in the development of rigorous safety evaluation of nanomaterials. The work is implemented through several projects to further develop appropriate methods and strategies to help ensure human health and environmental safety. More than 80 documents have been published in the Series on the Safety of Manufactured Nanomaterials (http://www.oecd.org/chemicalsafety/nanosafety/).

Several documents and dedicated websites related to pesticides and biocides management have been published since ICCM4 (see http://www.oecd.org/chemicalsafety/pesticides-biocides/).

SAICM objective: Governance

The system of Mutual Acceptance of Data (MAD) is based on OECD Test Guidelines and OECD Principles of Good Laboratory Practice (http://www.oecd.org/chemicalsafety/testing/) and allows participating countries to share the results of various non-clinical safety tests done on chemicals and chemical products. By avoiding duplication of testing, the MAD system saves a considerable number of test animals, and around 300 EUR

million per year to governments and industry according to the report Saving Costs in Chemicals Management published in 2019: http://www.oecd.org/chemicalsafety/saving-costs-in-chemicals-management-9789264311718-en.htm.

Since ICCM4, more than 20 new or updated Guidelines for testing chemicals for health effects, environmental effects, and pesticide residue chemistry have been published, and more than 20 documents supporting Test Guidelines have been published in the Series on Testing and Assessment. An important part of the work on Test Guidelines was dedicated to screening or testing of endocrine disrupting chemicals. In 2018, an update of the Guidance document for evaluating chemicals for endocrine disruption was published (https://doi.org/10.1787/9789264304741-en)

SAICM objective: Capacity Building and Technical Cooperation

eChemPortal (<u>www.echemportal.org</u>) is continuously updated and now links to 34 individual databases. Recent focus of the expansion of eChemPortal focused on facilitating access to information on how chemicals are classified in different countries according to the GHS.

SAICM objective: Illegal International Traffic

In the area of the illegal international trade of pesticides, the **OECD Network on Illegal trade of Pesticides** (**ONIP**) developed a Best Practice Guide (BPG) to address issues related to fighting illegal trade, and to strengthen a "Global Alliance" against illegal trade of pesticides. Furthermore, on 20 February 2019 the OECD Council adopted the Recommendation on Countering the Illegal Trade of Pesticides. This Recommendation calls for, among other things, establishing or strengthening national procedures aimed at countering the illegal trade of agricultural pesticides in line with the BPG. The Recommendation and BPG are available on the <u>Compendium of OECD Legal Instruments</u>.