



INTER-ORGANIZATION PROGRAMME FOR THE SOUND MANAGEMENT OF CHEMICALS

A cooperative agreement among FAO, ILO, UNDP, UNEP, UNIDO, UNITAR, WHO, World Bank and OECD

Activities of the IOMC to support SAICM Implementation

July 2015

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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 Convention, the interim Secretariat of the Minamata Convention, the Organization for the Prohibition of Chemical Weapons, and with the SAICM Secretariat.

II. New IOMC Activities and Resources, since ICCM3

Matrix of IOMC activities in countries

2. A recently updated matrix of IOMC activities in countries, available on the IOMC web site, provides a country-by-country overview of IOMC organizations' activities. (See www.who.int/iomc/en/.)

Analysis of implementation of the SAICM Global Plan of Action

3. The IOMC's second analysis of the Global Plan of Action (updated in June 2014) is also available on the IOMC web site, showing the contribution of IOMC organizations as actors and a high-level indication of progress.

IOMC Toolbox

4. In 2012, the IOMC organizations launched the proof-of-concept version of the IOMC Toolbox for decision making in chemicals management. The internet-based Toolbox enables countries to identify the most relevant and efficient tools (e.g. guidelines, protocols, data

sheets) to address specific national problems in chemicals management. The current version consists of a national management scheme for pesticides, an occupational health and safety system, and a chemical accidents prevention, preparedness and response system for major hazards. The IOMC Toolbox focuses on simple, effective solutions and takes into account as far as possible all material developed by the IOMC Participating Organizations. In 2013, the WHO received a grant from the EC, DG Environment, to further modify, expand and promote the IOMC Toolbox. Proposed activities are implemented under the umbrella of the IOMC by WHO in collaboration with FAO, ILO, UNEP, UNIDO, UNITAR and OECD. The 3-year project includes the development of four new management schemes, including a scheme for setting up a Pollutant Release and Transfer Register (PRTR), a scheme for the management of industrial chemicals, a scheme for implementing a classification and labelling system for chemicals (GHS), and a scheme for the public health management of chemicals. In addition, the IOMC Toolbox has already been pilot tested, web-applications of existing tools are being developed, and activities are undertaken to promote the use of IOMC Toolbox worldwide, thereby promoting the implementation of tools developed by all IOMC Participating Organizations, including the World Bank and UNDP. Information about the toolbox is provided on the IOMC web site.

SAICM emerging issues

5. The IOMC organizations have since the May 2009 International Conference on Chemicals Management assisted SAICM in implementing the Conference Resolutions on emerging policy issues. More precisely, IOMC organizations are leading or co-leading the activities on: chemicals in products (UNEP), hazardous substances within the life cycle of electrical and electronic products (UNIDO), lead in paint (UNEP and WHO), nanotechnology (OECD and UNITAR), perfluorinated chemicals (OECD and UNEP), and endocrine disrupting chemicals (OECD, UNEP and WHO). Information on the full range of IOMC contributions can be found in document SAICM/ICCM.4/9.

Quick Start Programme and SAICM governance

6. The IOMC organizations have continued to provide assistance to countries, on their request, to implement Quick Start Programme projects, and have continued to serve as members of the Trust Fund Implementation Committee.

7. The IOMC organizations have participated in all SAICM regional meetings, have co-organize back-to-back events, and participated in the Core Group/Coordinating Committees of the regions for Africa, Central and Eastern Europe, Latin America and the Caribbean, and Asia-Pacific. The Chair of the IOMC participates as an observer in the Bureau of the International Conference.

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

15. The following section provides information on activities since ICCM3 (September 2012), 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 activity relating to chemicals management is in the area of pesticides use in crop production and animal husbandry, food safety and the impact of chemicals in the environment on resources such as fish stocks, forests and irrigation water. 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 practice in the regulation, management and use of chemicals in agriculture.

FAO's strategic plan integrates sustainable agricultural production with sustainable diets, conservation of natural resources, improvement of rural livelihoods and access to national and international markets. Chemicals management in this context focuses on risk reduction through reduced reliance on and sound use of chemicals in agriculture. 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 chemicals management. 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 chemicals management and risk reduction is backed by an extensive programme of standard setting, 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, determine technical specifications for pesticide formulations to ensure product quality, and produce guidelines, training materials and tools to assist countries. The entire 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 activity is reduction of risks from Highly Hazardous Pesticides as defined by the FAO/WHO Panel of Experts on Pesticides Management in 2008 (<http://www.fao.org/agriculture/crops/core-themes/theme/pests/pm/code/hhp/en/>) . 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.

Integrated Pest Management (IPM) is a key risk reduction strategy and is at the core of FAO's crop production and protection approach as defined in the recently published document *Save and Grow* (<http://www.fao.org/ag/save-and-grow/>). In IPM, farmers are informed about ecological approaches to crop production and 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.

SAICM objective: Knowledge and Information

Currently more than 50 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. All technical standards for pesticide specifications and Maximum Residue Limits are published on-line as they are produced. Project summaries and lessons learned are also published on-line.

SAICM objective: Governance

The International Code of Conduct on Pesticide Management provides a 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 November 2011 span 60 countries, and more are in development as others conclude their activities continuously.

Training is offered on an ongoing basis on every aspect of FAO's work on pesticides management and standard setting and collaboration with other agencies through IOMC expands opportunities for capacity development. FAO is also supporting a post-graduate programme on pesticides management at the University of Cape Town.

SAICM objective: Illegal International Traffic

FAO works with countries to build capacity in every stage of the pesticide life cycle. This includes effective import controls which is the most effective point 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 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 the 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.

Through the ILO's Labour Administration, Labour Inspection and Occupational Safety and Health Branch (LABADMIN/OSH), focus is placed on assisting member States to implement firstly, 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 1&2&3 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

Under the auspices of IOMC, the ILO is assisting in developing an internet-based problem-solving tool (toolbox) that will enable countries to identify the most relevant and efficient tools to address specific national problems in chemicals management. The Toolkit on occupational safety and health management systems for chemicals has been completed in collaboration with the OECD, and currently the ILO is assisting the OECD in the development of the toolkit on the prevention of major hazards and UNITAR on the toolkit on the GHS.

In addition, the ILO has developed and is currently piloting two distinct risk assessment tools. One for large and medium sized and another to small enterprises. Whilst both look at occupational safety and health, they both carry modules that deal with the risk posed by chemicals in the workplace and how they should be assessed.

The ILO, in collaboration with the WHO and European Commission, also develops the International Chemical Safety Cards (ICSC) which are intended to provide essential safety and health information on chemicals in a clear and concise way. To date, 1700 cards are available in English, French, Spanish, Dutch, Finnish, German, Hungarian, Japanese, Polish, Italian, Hindi, Korean, Russian, Swahili, Thai and Urdu.

SAICM objective: Knowledge and Information

The ILO-SafeWork website includes a specific section on chemicals and the environment at <http://www.ilo.org/safework/areasofwork/chemical-safety-and-the-environment/lang-en/index.htm> which provides information on SAICM.

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 UNITAR's 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 the WHO and European Commission, also develops the International Chemical Safety Cards (ICSC) which are intended to provide essential safety and health information on chemicals in a clear and concise way. To date, 1700 cards are available in English, French, Spanish, Dutch, Finnish, German, Hungarian, Japanese, Polish, Italian, Hindi, Korean, Russian, Swahili, Thai and Urdu.

SAICM objective: Governance

As indication of support for the outcomes of ICCM, the Governing Body of the ILO endorsed the SAICM at its 297th Session (November 2006) and approved the follow-up activities proposed by the Office to implement SAICM objectives 2006.

The ILO has been supporting SAICM development process through participation and contributions to preparatory meetings as well as the ICCM. The ILO, together with IOMC is a member of the SAICM Quick Start Programme Implementation Committee and the Executive Board.

The ILO also supports member States implement ILO Conventions 170 (Chemicals) and 174 (Major Industrial Accidents) which have been recognised by SAICM to be the main international agreements for the sound management of chemicals at the workplace.

THE ILO Governing Body at its 322nd Session (November 2014) will discuss the ILO's follow-up to the Minamata Convention on Mercury.

SAICM objective: Capacity Building and Technical Cooperation

The ILO (SafeWork) has commissioned two studies to raise awareness in countries about the OSH implications of electronic waste and so-called “green jobs”. These studies will be made available to ICCM4 as they focus on one of the emerging issues identified under SAICM as well as one of the main topics that was discussed at Rio+20. The Theme of the World Day for Safety and Health at Work on 28 April 2014 was “Safety and health in the use of chemicals at work”. With this in mind, a report was prepared and is available on the LADADMIN/OSH website. This reports forms part of a much more in depth study on hazards associated with green technologies.

A study on electronic waste has also been prepared by LABADMIN/OSH and the ILO SECTORAL activities department. Titled *The Global Impact of E-Waste: Addressing the Challenge*, it explores the volumes, sources and flows of e-waste, the risks it poses to e-waste workers and the environment, occupational safety and health (OSH) issues, labour issues and regulatory frameworks, and links this growing global problem with the International Labour Organisation (ILO)'s current and future work. Linked to this work, a fact-finding study on electronic waste in the Peoples Republic of China is currently being finalized.

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.

As one of the implementing agencies of the Global Environment Facility (GEF), as of June 2015 UNDP is supporting 25 countries in implementing thirty five projects to address Persistent Organic Pollutants, lead, and mercury with a combined portfolio of projects amounting to US\$ 143 million of grants provided by the GEF and co-financing of US\$ 226 million. UNDP supported activities resulted so far in 300,000 people trained in POPs management/alternatives, 9,500 tonnes of POPs chemicals properly disposed, and 335,000 tonnes of POPs contaminated waste safeguarded.

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 2,331 projects in 120 countries. UNDP's portfolio of ozone-related projects has a cumulative total value exceeding US\$ 731 million in grant funding and to date has prevented the release of 67,870 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 heavy metals 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.

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 Integrating the Sound Management of Chemicals into MDG-Based Development Planning* 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.

In addition to GEF projects on e-waste management that also address illegal international traffic, UNDP works on illegal movement of e-waste at country level through the framework provided by the Partnership for Action on Computing Equipment (PACE) working group under the Basel Convention.

United Nations Environment Programme (UNEP)

UNEP has facilitated the negotiations of a number of international treaties on chemicals and waste, the latest one the Minamata Convention on Mercury, and hosts secretariats of most of these, including the interim Secretariat for the Minamata Convention.

(<http://www.unep.org/chemicalsandwaste/Introduction/tabid/258/Default.aspx>)

SAICM objective: Risk Reduction

UNEP is working on a number of chemicals, such as mercury, lead, POPs, Ozone Depleting Substances and chemicals issues such as Chemicals in Products, endocrine disrupting chemicals, chemical accident prevention.

For mercury, the UNEP Global Mercury Partnership consists of activities to reduce, and where feasible, eliminate anthropogenic releases of mercury to air, water and land.

(<http://www.unep.org/chemicalsandwaste/Mercury/GlobalMercuryPartnership/tabid/1253/Default.aspx>)

UNEP-led work on lead and cadmium, in coordination with other IOMC members, will continue to promote and facilitate the Global Alliance to Eliminate Lead Paint (GAELP)

(<http://www.unep.org/chemicalsandwaste/Home/tabid/197/chemicalsandwaste/LeadCadmium/tabid/29372/Default.aspx>)

(<http://www.unep.org/chemicalsandwaste/hazardoussubstances/LeadCadmium/PrioritiesforAction/GAELP/tabid/6176/Default.aspx>)

UNEP continues to assist the implementation and monitoring of the Stockholm Convention on POPs, and plays a leading role in the GEF implementation in some key areas of human and environmental protection. UNEP's Chemicals Branch is acting as secretariat for the Global Alliance on DDT uses and alternatives and the PCB Elimination Network (PEN).

(<http://www.chem.unep.ch/Pops/default.htm>)

UNEP assists developing countries and countries with economies in transition (CEITs) to enable them to achieve and sustain compliance with the Montreal Protocol.

(<http://www.unep.org/ozonaction/>)

UNEP supports an initiative to promote chemical accident prevention worldwide.

(<http://www.unep.org/flexibleframework/>)

As requested through a resolution by ICCM2 on the emerging policy issue "Chemicals in Products", UNEP is leading a project to improve the availability and access to information on chemicals in products in the supply chain and throughout their life cycle.

(<http://www.unep.org/chemicalsandwaste/UNEPsWork/ChemicalsinProductsproject/tabid/56141/Default.aspx>)

UNEP is furthermore developing The Global Platform for Waste Management (GPWM), an open-ended partnership for international agencies, governments, businesses, academia, local authorities and NGOs

SAICM objective: Knowledge and Information

UNEP launched a Global Chemicals Outlook in 2013 founded on previous OECD industry analysis. The Outlook addresses the consequences of the continuing shift in chemical use and production from developed to developing countries, highlighting potential negative impacts.

(<http://www.unep.org/chemicalsandwaste/UNEPsWork/Mainstreaming/GlobalChemicalsOutlook/tabid/56356/Default.aspx>)

UNEP has finalized a study of the cost of inaction on sound management of chemicals with input from the World Health Organization, the Organization for Economic Cooperation and Development and others.

(<http://www.unep.org/chemicalsandwaste/UNEPsWork/Mainstreaming/CostsofInactionInitiative/tabid/56397/Default.aspx>)

SAICM objective: Governance

UNEP hosts the SAICM Secretariat and is the trustee for the SAICM Quick Start Programme (www.saicm.org). UNEP also hosts the Interim Secretariat for the Minamata Convention on Mercury, which was adopted and opened for signature at the Conference of Plenipotentiaries held in October 2013 in Japan. (<http://www.mercuryconvention.org/>)

UNEP and WHO lead the Health and Environment Strategic Alliance, for which an African Framework to reduce chemicals risks to human health and the environment has been drafted. (<http://www.unep.org/chemicalsandwaste/UNEPsWork/Mainstreaming/GlobalChemicalsOutlook/Linkagesbetweenthehealthandenvironment/tabid/56372/Default.aspx>)

The first United Nations Environment Assembly adopted a Resolution 5 on an integrated approach to financing sound management of chemicals and waste. The Resolution provides the terms of reference for a Special Programme to be funded by voluntary contributions, and requests the UNEP Executive Director to establish and administer the Special Programme Trust Fund and provide a Secretariat to deliver administrative support. (http://www.unep.org/unea/UNEA_Resolutions.asp)

SAICM objective: Capacity Building and Technical Cooperation

UNEP partners UNDP to promote the Integration of sound management of chemicals into development strategies and policies. Training programmes and guidance materials on how to perform economic assessment of the lack of sound management of chemicals have been prepared for UNDP to deploy in its country programmes. (<http://www.unep.org/chemicalsandwaste/UNEPsWork/Mainstreaming/tabid/29746/Default.aspx>)

UNEP has also developed guidance on the development of legal and institutional infrastructures for sound management of chemicals and on measures for recovering costs of national administrations (<http://www.unep.org/chemicalsandwaste/UNEPsWork/Mainstreaming/UNEPLIRAGuidance/tabid/79269/Default.aspx>)

UNEP has furthermore supported a number of country projects on POPs. (<http://www.unep.org/chemicalsandwaste/UNEPsWork/PersistentOrganicPollutantsPOPs/POPsAnalysisandMonitoring/tabid/105850/Default.aspx>)

SAICM objective: Illegal International Traffic

The UNEP-led Green Customs Initiative is a partnership of international organizations cooperating to prevent the illegal trade in environmentally-sensitive commodities and facilitation of the legal trade in these. (<http://www.greencustoms.org/>)

United Nations Industrial Development Organization (UNIDO)

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. UNIDO's efforts related to the management of chemicals are carried out within the Green Industries Initiative, which focuses on promoting greater efficiency in the use of resources by industries, costs reductions, better image and less technical barriers to trade.

The Global RECP Programme, through the application of the RECP methodology, contributes to building capacity and implementing sound management practices at company level, offering a set of services like: information dissemination, training, technical assistance, TEST and investment promotion and CP policy advice.

The RECP Centres also support national governmental institutions in implementing the SAICM Global Plan of Action, through joint implementation of the Quick Start Programme.

The UNIDO/ UNEP RECP Programme included as part of its strategy chemical management to be implemented by the NCPCs in developing and transition countries.

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

SAICM objective: Risk Reduction

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, e-waste, 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.

UNIDO has been strengthening its support to developing and transition countries in the formulation and implementation of projects submitted to the Trust Fund Implementation Committee of the SAICM Quick Start programme.

The projects target the implementation of life cycle analysis for priority chemical products and substances in El Salvador, the establishment of inter-institutional coordination mechanisms in the area of sound chemicals management in Peru, strengthening of national governance for SAICM implementation in Colombia, the safe handling of mercury products in Uruguay, the formulation of an integrated approach to national chemicals management in Sudan, and reducing risk from mercury use in artisanal and small scale gold mining in Mali and Côte d'Ivoire.

UNIDO is also providing a supporting role in many projects in the area of reducing mercury risks from artisanal gold mining, respectively in Burkina Faso, Colombia, Ecuador, Mali, Peru, the Philippines and Senegal.

SAICM objective: Knowledge and Information

UNIDO is supporting countries in the formulation and implementation of QSPTF projects and ensures that all the information from QSPTF projects is shared and disseminated at national and regional level.

UNIDO has been providing an active contribution in the Global Mercury Partnership, where the organization is co-leader in the area of artisanal gold mining (ASGM) through the introduction of cleaner artisanal gold mining and extraction technologies, the implementation of training and awareness campaigns, the assistance to national and international mercury and ASGM policy improvement while monitoring health and the environment.

UNIDO has also taken a lead in industry's approach to addressing e-waste focusing on promoting sustainable recycling industries, developing national e-waste management strategies for the whole recycling chain; providing technical assistance to set-up or up-scale infrastructure and supporting the establishment of industrial dismantling facilities.

UNIDO has signed up to Global Alliance for Eliminating Lead in Paint and focuses its activities on assisting small and medium-scale enterprises in implementing projects in cooperation with its RECPs in the Latin American region.

SAICM objective: Governance

UNIDO has initiated the establishment of inter-institutional coordination mechanisms in the area of sound chemicals management. Ongoing activities aim to enable countries to achieve a coordinated evaluation, control and follow-up in the management of all chemical substances and products, responsibilities which are usually diluted among different national institutions.

UNIDO's involvement in the implementation of the Stockholm Convention on POPs focuses its core activities on policies for POPs management (e.g. National Implementation Plans), the promotion and demonstration of best available techniques and best environmental practices (BAT/BEP) to reduce unintentionally produced POPs (u-POPs), the management of polychlorinated biphenyls (PCBs), the production of POPs alternative, the management of recycling chains with potential for POPs recycling or formation and the area-based eco-effective chemicals management, inclusive eco-industrial parks.

UNIDO is also involved in the early implementation of the Minamata Convention on mercury with support to countries for the ratification process through Minamata Initial Assessment projects and National Action Planning for the AS GM sector.

SAICM objective: Capacity Building and Technical Cooperation

UNIDO supports countries in the formulation and implementation of QSPTF projects targeting country specific priorities and benefiting from facilitators and technical assistance of the National Cleaner Production Centres (NCPCs) focusing in four areas: resource productivity, environmental management, entrepreneurship and public private partnership.

NCPCs deliver training on RECP-related topics to build local capacity in various target groups. Practical implementation is part of the training activities, to strengthen national capacities to plan and execute RECP-related actions and solutions. NCPCs are expected to achieve their financial self-sustainability; capacity building for resource mobilization to support the continuation of their operation is another area of intervention of UNIDO/UNEP.

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 SAICM-related areas to protect human health and the environment from toxic chemicals and wastes, often in collaboration with other IOMC POs. This includes: (i) infrastructure and capacity assessments (e.g. National Profiles, Globally Harmonized System of Classification and Labelling of Chemicals (GHS) situation analyses); (ii) integrated national programmes for chemicals and waste management: assisting countries to establish and strengthen a collaborative framework at the national level which can provide a foundation for effective and coordinated action to address both national chemicals management priorities as well as the implementation of international chemicals and waste related agreements and initiatives; and (iii) specialised training and capacity building addressing, for example, the GHS, pollutant release and transfer registers (PRTR), mercury inventory development and risk management decision-making, nanotechnology and manufactured nanomaterials, and chemicals and waste related agreement implementation.

SAICM objective: Risk Reduction

UNITAR supports projects in developing and transition countries to prepare mercury emissions inventories using UNEP's Toolkit for Identification and Quantification of Mercury Releases. In addition, UNITAR has provided guidance to assist with preparing national plans to reduce risks related to mercury.

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 minimized risks to human health and the environment through improved hazard communication.

SAICM objective: Knowledge and Information

To support national SAICM implementation, UNITAR has developed/revised and pilot tested a number of key guidance materials (www.unitar.org/cwm/publications), including *Guidance for Developing SAICM Implementation Plans* (in collaboration with SAICM Secretariat and IOMC) and *Guidance for Developing a National Nanotechnology Policy and Programme*.

The National Profile Homepage, www.unitar.org/cwm/nphomepage, 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 (<http://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's current PRTR activities provide technical assistance, guidance and reference materials, and support for country-based activities, including development of inventories of releases of POPs. In addition, UNITAR's PRTR:Learn (<http://prtr.unitar.org>) provides an interactive website that has the main objective of sharing insights, information, knowledge, and resources on PRTRs.

In collaboration with UNEP, UNITAR has also developed Mercury:Learn (<http://mercury.unitar.org>), a platform that provides online training modules on developing

mercury releases inventories, based on UNEP's Toolkit on Identification and Quantification of Mercury Releases.
SAICM objective: Governance
<p>Many of the QSP strategic priorities to support enabling activities at the national level (outlined in ICCM Resolution 1/4) are specific areas of capacity building for which UNITAR has, over the past years, developed and tested guidance materials in collaboration with a diverse range of countries, IOMC POs, and other partners.</p> <p>UNITAR, in coordination with the IOMC, participated in SAICM preparatory meetings, the ICCMs, and numerous regional SAICM workshops, and is a member of the SAICM QSP Trust Fund Implementation Committee and QSP Executive Board. 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.</p>
SAICM objective: Capacity Building and Technical Cooperation
<p>UNITAR established a SAICM implementation programme in 2006, with core support provided by the Government of Switzerland, and focusing on strengthening capacities for sound chemicals management with an emphasis on assisting countries and regions with SAICM implementation, nanotechnology, and addressing challenges related to mercury and other heavy metals.</p> <p>UNITAR also supports QSP Trust Fund projects. To date, UNITAR has been serving as the international executing agency for 70 projects supported by the QSP Trust Fund (Rounds 1-13).</p> <p>UNITAR also embarked with partners such as OECD, and within the framework of the IOMC, to raise awareness in countries about nanotechnology/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 UN 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. Three additional pilot projects are currently underway, also with financial support from the Government of Switzerland. A series of sub-regional workshops on nanosafety took place in 2015 for the Africa, Latin America and Caribbean, and Asia-Pacific regions. See also the UNITAR/OECD report on nanotechnology (SAICM/ICCM.3/17).</p> <p>In 2012, in cooperation with UNIDO and the Secretariat of the Stockholm Convention, and with the support of the GEF, UNITAR developed guidance documents and training material on updating National Implementation Plans (NIPs) under the Stockholm Convention taking into account the new POPs added to the Convention. http://chm.pops.int/Implementation/NIPs/Guidance/tabid/2882/Default.aspx</p>
SAICM objective: Illegal International Traffic
The POPs project noted above will also help countries address illegal traffic.

World Health Organization (WHO)

The following paragraphs provide some examples of relevant WHO activities since ICCM3. Readers are also referred to ICCM documents on the SAICM emerging policy issues, and the Information Document submitted by WHO on engagement of the health sector in SAICM which provides additional examples of work by WHO Regional Offices.

SAICM objectives: Risk Reduction and Knowledge and Information

Examples of guidance materials, chemical risk assessments and risk assessment methodologies published by WHO since ICCM3 follow.

Chrysotile Asbestos (2014): a summary of WHO technical information and policy

http://www.who.int/ipcs/assessment/public_health/chrysotile_asbestos_summary.pdf?ua=1

Risk assessment of hexavalent chromium compounds

http://www.who.int/entity/ipcs/publications/cicad/cicad_78.pdf

Setting the Research Agenda on the Health Effects of Chemicals, Int. J. Environ. Res. Public Health <http://www.mdpi.com/1660-4601/11/1/1049>

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/>

New developments in the evolution and application of the WHO/IPCS framework on mode of action/species concordance analysis, Journal of Applied Toxicology.

<http://onlinelibrary.wiley.com/doi/10.1002/jat.v34.1/issuetoc>

WHO/IPCS Guidance on Evaluating and Expressing Uncertainty in Hazard Assessment of Chemicals,

http://www.who.int/entity/ipcs/methods/harmonization/uncertainty_in_hazard_characterization.pdf?ua=1

Identifying important life stages for monitoring and assessing risks from exposures to environmental contaminants: Results of a World Health Organization review. Regulatory Toxicology and Pharmacology. <http://dx.doi.org/10.1016/j.yrtph.2013.09.008>

Aircraft disinsection insecticides

http://www.who.int/iris/bitstream/10665/100023/1/9789241572439_eng.pdf

An automated translation database for the International Chemical Safety Cards (ICSC) has been built, in collaboration with ILO, and additional languages are being implemented so that in future the latest update of each ICSC will be available at the same time in all the languages. New web interface <http://www.ilo.org/dyn/icsc/>

SAICM objective: Governance

New WHO publications on lead, and information about the International Lead Poisoning

Prevention Awareness Weeks in 2013, 2014 and 2015 can be found at:

http://www.who.int/entity/ipcs/lead_campaign/en/index.html

In relation to the Minamata Convention, WHO guidance on public health strategies for ASGM is in preparation. Step-by-step guide for Ministries of Health on the phase-out of mercury thermometers and sphygmomanometers has been published.

http://www.who.int/ipcs/assessment/public_health/mercury/en/

Contributions to the Conferences of the Parties to the Rotterdam and Stockholm Conventions included a WHO submission on DDT as well as collaborative work with the Convention Secretariats on lindane and the POPs human milk survey.

SAICM objective: Capacity Building and Technical Cooperation

Poisons prevention, information and management is a significant focus of WHO activities relevant to capacity-building and technical cooperation and work continues to establish and strengthen the capacity of poisons centres worldwide providing updated tools and guidance to support their activities.

Work was completed to support the inclusion in the WHO Essential Medicines List of fomepizole for the treatment of methanol and ethylene glycol poisoning.

WHO produced guidance materials and fact sheets on chemical weapons.

http://who.int/environmental_health_emergencies/deliberate_events/en/

A SAICM Quick Start Programme (QSP) project on assessing the feasibility of a subregional poisons centre in East Africa was conducted.

Work continued on the development of WHO guidelines for the prevention and management of lead poisoning, including a meeting of the Guideline Development Group in March 2014.

In 2013 and 2014, 54 events were evaluated for their public health significance and the need for technical support by WHO/IPCS and significant support was provided in 34 events.

The other significant focus of capacity building activities in 2013-2014 is chemical risk assessment. A WHO Chemical Risk Assessment Network was officially launched on 1 July 2013, aiming to strengthen chemical risk assessment globally. For more information, see

<http://www.who.int/ipcs/network/en/>

Led by the WHO Collaborating Centre at the Chulabhorn Research Institute, an electronic Distance Learning Tool on chemical risk assessment, supported by the QSP Trust Fund was launched in February 2013. <http://www.chemDLT.com>

In partnership with ILSI/HESI WHO launched an on-line database of chemical risk assessment training courses worldwide. The database allows for searching for in-person and online post- and undergraduate, continuing education and society-sponsored training courses, of a non-profit nature. <https://www.risktraindb.org/>

WHO with partners continued to deliver numerous training events on chemical risk assessment.

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 solid waste management components that is also of direct relevance.

The World Bank Environment Strategy for 2012-2022, *Toward a Green, Clean, and Resilient World for All*, with its emphasis on working with Bank client countries to face the challenges of increasing air, water, and soil pollution as well as the challenges of legacy pollution, is directly relevant to the Strategic Approach. The Strategy foresees a focus on addressing legacy pollution resulting from past industrial activities, and water basin cleanup including agricultural runoff, with global transboundary impacts of hazardous chemicals continuing to be a priority.

The World Bank provides assistance to developing country partners related to SAICM objectives through Bank lending programs, mobilization of GEF and other grant resources, analytical and advisory services, dedicated technical assistance and capacity building trust funds, and through application of its environmental safeguards policies, notably on environmental assessment and pest management.

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

SAICM objective: Risk Reduction
<p>The World Bank Group has been active in public and private sector pollution management for several decades. 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. Projects for example are tackling pollution from an aluminum smelter, minimizing the exposure of humans and livestock to radionuclides associated with abandoned uranium mine tailings, cleaning up mercury pollution, and remediating ground water pollution from historical industrial hazardous wastes.</p> <p>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.</p> <p>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 strong potential for synergies and mainstreaming chemicals management in Bank operations that can be explored and expanded based on client country priorities.</p>
SAICM objective: Knowledge and Information
<p>The World Bank Group keeps a wealth of information available to the general public through its websites, including the Environmental Health and Safety Guidelines available on the</p>

website of the International Finance Corporation, including industry sector specific guidelines (www.ifc.org/sustainability), and the *Sourcebook of Pollution Management Policy Tools*.

Other products generated by the World Bank are available in hard and soft copies for all interested stakeholders.

SAICM objective: Governance

As 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 policy on environmental assessment used to examine environmental risks and benefits associated with all Bank investments and enhance their environmental impact, 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, and Stockholm 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 long-term sustainability of efforts.

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 modernisation 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. A 2008 OECD Council Resolution on the Implementation of the SAICM calls for countries to work together in OECD to ensure that, as chemicals management programmes are established or upgraded, OECD products will be accessible, relevant and useful to non-members in order to assist them in developing their capacities for managing chemicals. As a result, the 2013-2016 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 launched a project on the substitution of hazardous chemicals and alternatives assessment. An online toolbox was published in January 2015 that provides an inventory of substitution and alternatives assessment tools and an online selector tool that allows the user to identify the assessment tools that are best suited for his/her purpose; see <http://www.oecd-saatoolbox.org/>.

An internet-based platform for information exchange, review of recent documents and further elaboration of incentives to promote sustainable chemistry was made public in October 2009 and is being updated regularly; see <http://www.oecd.org/env/sustainablechemistry>.

The OECD/UNEP Global Perfluorinated Chemicals (PFC) Group published a Synthesis Paper on Per and Polyfluorinated Chemicals in 2013: <http://oecd.org/chemicalsafety/risk-management/synthesis-paper-on-per-and-polyfluorinated-chemicals.htm>. Four webinars have been organised to communicate the conclusions of this paper: <http://oecd.org/ehs/pfc/>

SAICM objective: Knowledge and Information

OECD-agreed hazard assessments are available to the public and can be used for priority setting, classification and labelling, risk assessment and other activities within national or regional programmes. Conclusions have been published for more than 1200 chemicals. All assessment reports can be found on the OECD Existing Chemicals Database: <http://www.oecd.org/env/hazard/data>.

A new version of the [OECD Guidance of Grouping of Chemicals](#) and a report on a [pilot exercise in applying GHS classifications](#) were published in 2014.

The OECD QSAR Toolbox is 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: www.oecd.org/env/hazard/qsar.

In an effort to make better use of increased knowledge of how chemicals induce adverse effects in humans and wildlife, the Adverse Outcome Pathway Knowledge Base was published in 2014: <http://www.oecd.org/chemicalsafety/launch-adverse-outcome-pathways-knowledge-base.htm>.

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: <http://www.oecd.org/env/ehs/risk-assessment/exposureassessment.htm>. Several guidance documents, such as [emission scenario documents](#) and a [guidance document for exposure assessment based on environmental monitoring data](#) were released in 2013 and 2014.

Pollutant Release and Transfer Registers (PRTRs) help governments respond to the public's right to know by providing data on release and transfer of pollutants to the environment. A number of projects were completed in 2013/2014, which includes guidance on setting up PRTRs and release estimation techniques (<http://www.oecd.org/env/prtr>).

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 40 documents have been published in the Series on the Safety of Manufactured Nanomaterials (<http://www.oecd.org/env/nanosafety>).

Several documents and dedicated websites related to pesticides and biocides management have been published since ICCM3 (see <http://www.oecd.org/env/biocides> and <http://www.oecd.org/env/pesticides>).

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/env/glp>) 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 150 EUR million per year to governments and industry according to the report *Cutting Costs in Chemicals Management* published in 2010: <http://www.oecd.org/dataoecd/55/4/47813784.pdf>. South Africa, Singapore, India, Brazil, Argentina and Malaysia are full adherents to the MAD system; Thailand is a provisional adherent.

Since ICCM3, more than 15 new or updated Guidelines for testing chemicals for health effects, environmental effects, and pesticide residue chemistry have been published (http://www.oecd-ilibrary.org/content/package/chem_guide_pkg-en), and more than 20 documents supporting Test Guidelines have been published in the Series on Testing and Assessment (www.oecd.org/ehs/testingandassessment). An important part of the work on Test Guidelines was dedicated to screening or testing of endocrine disrupting chemicals.

SAICM objective: Capacity Building and Technical Cooperation

A new version of the eChemPortal launched in 2014 allows users to filter research results based on type of information (e.g. use pattern vs. GHS classifications) [<http://www.oecd.org/ehs/eChemPortal>]. A additional upgrade was launched in June 2015 which allows users to query for existing classifications of chemicals according to the GHS. In 2013 and 2014, six new participating data sources were added to eChemPortal.

The OECD Environmental Risk Assessment Toolkit was transformed into an interactive web application [<http://envriskassessmenttoolkit.oecd.org/>]. This Toolkit describes the work flow for environmental risk assessment and management of chemicals with links to available OECD tools and products relevant for the different steps in risk assessment and management.