FINAL REPORT

Independent Evaluation of the Strategic Approach from 2006 - 2015

PREPARED BY INDEPENDENT EVALUATOR: DR ROBERT NURICK

10 September 2019
# TABLE OF CONTENTS

**ACRONYMS** .................................................................................................................. 4
**INTRODUCTION** .......................................................................................................... 7
**OBJECTIVE** .................................................................................................................. 7
**BRIEF HISTORY** ........................................................................................................... 8
**SCOPE, METHODS AND THEORY OF CHANGE APPROACH** ........................................ 12
  Institutional arrangements within the voluntary multi-sectoral approach of the Strategic Approach ................................................................. 12
  Management of the Strategic Approach ..................................................................... 16
  Theory of Change ......................................................................................................... 18
**OUTPUTS, OUTCOMES AND IMPACTS OF SAICM** ...................................................... 21
  Outputs: Resolutions, Procedures and Modalities ..................................................... 21
    ICCM1 ....................................................................................................................... 21
    ICCM2 ....................................................................................................................... 24
    ICCM3 ....................................................................................................................... 30
    ICCM4 ....................................................................................................................... 34
  Outcomes: EPIs, QSP projects, monitoring progress ............................................... 39
    Emerging Policy Issues and Other Issues of Concern ............................................ 39
      EPI – Lead in Paint .................................................................................................. 40
      EPI – Chemicals in Products ............................................................................... 41
      EPI – Hazardous Substances within the Life Cycle of Electrical and Electronic Products ......................................................................................... 42
      EPI – Nanotechnologies and Manufactured Nanomaterials .................................. 43
      EPI – Endocrine-Disrupting Chemicals ................................................................. 45
      Issue of concern – Perfluorinated Chemicals ......................................................... 46
    Quick Start Programme projects .......................................................................... 47
    Monitoring progress including Global Plan of Action, Indicators of Progress and the Overall Orientation and Guidance (OOG) ......................... 49
  Drivers ......................................................................................................................... 52
    Capacity of Secretariat to fulfill functions .............................................................. 52
    Information sharing and collaboration ................................................................... 54
    Secure, sustainable and adequate financing ......................................................... 56
**Intermediate State 1: Strengthened capacity, commitment, technical knowledge, political will to implement and mainstream SAICM** ......................................... 57
**Africa Region** ............................................................................................................ 57
  Coordination within Government and stakeholder engagement and collaboration ..... 57
  Strategic Plan to Address Chemicals and Waste ..................................................... 58
  Regional cooperation on chemicals and waste management .................................... 59
**Asia Pacific Region** .................................................................................................. 60
  Coordination within Government and stakeholder engagement and collaboration ..... 60
  Strategic Plan to Address Chemicals and Waste ..................................................... 61
  Regional cooperation on chemicals and waste management .................................... 61
**Central and Eastern Europe Region** ......................................................................... 62
  Coordination within Government and stakeholder engagement and collaboration ..... 62
  Strategic Plan to Address Chemicals and Waste ..................................................... 63
  Regional cooperation on chemicals and waste management .................................... 63
**Latin America and the Caribbean Region (LAC)** .................................................... 64
  Coordination within Government and stakeholder engagement and collaboration ..... 64
  Strategic Plan to Address Chemicals and Waste ..................................................... 65
  Regional cooperation on chemicals and waste management .................................... 66
**Western Europe and Others Group** ........................................................................ 66
  Factors influencing NFP role ................................................................................... 68
**Intermediate State II: Overarching Policy Strategy Objectives** .................................. 70
  Risk reduction ........................................................................................................... 70
Knowledge and information ........................................................................................................74
Governance ............................................................................................................................77
Capacity building and technical cooperation ......................................................................80
Illegal international traffic ...................................................................................................82
Overall Impact: By 2020 Chemicals are used and produced in ways that lead to the
minimization of significant adverse effects on human health and the environment .............84
Conclusions and Lessons Learnt ..........................................................................................87
Strengths ................................................................................................................................87
Weaknesses .............................................................................................................................89
Lessons Learnt .......................................................................................................................91
ACRONYMS

AFR  Africa
AP   Asia Pacific
BASF Baden Aniline and Soda Factory
BRS  Basel, Rotterdam and Stockholm (BRS) Secretariat
CBI  confidential business information
CEE  Central & Eastern Europe
CEHI Caribbean Environmental Health Institute
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
CiP  Chemicals in Products
CLP  Classification, Labeling and Packaging
COP  Conference of the Parties
CSR  Corporate Social Responsibility
National Advisory Committee for the Integrated Management of Chemical Substances, Persistent Organic Pollutants and Hazardous Waste subject to International Agreements, in Environmental Matters (Mexico)
CCNSG
DAC  Development Assistance Committee
DDT  Dichlorodiphenyltrichloroethane
DTIE  Division of Technology, Industry and Economics
EAC  East African Community
EAEC  Eurasian Economic Union
EB   Quick Start Program Executive Board
ECOWAS Economic Community of West African States
EDC  Endocrine Disrupting Chemicals
EF   Environment Fund
e-learning Electronic learning
EPI  Emerging Policy Issues
EU   European Union
EUJUSSCANNZ European Union - Japan, United States, Switzerland, Canada, Australia, Norway and New Zealand
e-waste Electronic waste
FAO  Food and Agriculture Organization
FDI  Foreign Direct Investment
FTE  Full-time equivalent
GEF  Global Environment Facility
GHS  Globally Harmonized System of Classification and Labelling of Chemicals
GPA  Global Plan of Action
HHP  Highly Hazardous Pesticides
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSLEEP</td>
<td>Hazardous Substances within the Life Cycle of Electrical and Electronic Products</td>
</tr>
<tr>
<td>IC</td>
<td>Quick Start Program Implementation Committee</td>
</tr>
<tr>
<td>ICCA</td>
<td>International Council of Chemical Associations</td>
</tr>
<tr>
<td>ICCM</td>
<td>International Conference on Chemicals Management</td>
</tr>
<tr>
<td>IFCS</td>
<td>The Intergovernmental Forum on Chemical Safety</td>
</tr>
<tr>
<td>IGO</td>
<td>Inter-Governmental Organizations</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>INERIS</td>
<td>French National Institute for Industrial Environment and Risks</td>
</tr>
<tr>
<td>IOMC</td>
<td>The Inter-Organization Programme for the Sound Management of Chemicals</td>
</tr>
<tr>
<td>IPBES</td>
<td>Intergovernmental Platform of Biodiversity and Ecosystem Services</td>
</tr>
<tr>
<td>IPCS</td>
<td>International Programme for Chemical Safety</td>
</tr>
<tr>
<td>IPEN</td>
<td>International POPs Elimination Network</td>
</tr>
<tr>
<td>ISDE</td>
<td>International Society of Doctors for the Environment</td>
</tr>
<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
</tr>
<tr>
<td>LAC</td>
<td>Latin America and the Caribbean</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>NIP</td>
<td>National Implementation Plan</td>
</tr>
<tr>
<td>NFP</td>
<td>National Focal Point</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>MERCOSUR</td>
<td>Mercado Común del Sur</td>
</tr>
<tr>
<td>ODA</td>
<td>Official Development Assistance</td>
</tr>
<tr>
<td>ODS</td>
<td>Ozone Depleting Substances</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>OELTWG</td>
<td>Open-Ended Legal and Technical Working Group</td>
</tr>
<tr>
<td>OEWG</td>
<td>Open-ended Working Group</td>
</tr>
<tr>
<td>OOG</td>
<td>Overall Orientation and Guidance</td>
</tr>
<tr>
<td>OPS</td>
<td>Overarching Policy Strategy</td>
</tr>
<tr>
<td>OSCE</td>
<td>Organization for Security Cooperation in Europe</td>
</tr>
<tr>
<td>PAHO</td>
<td>Pan American Health Organization</td>
</tr>
<tr>
<td>PAN</td>
<td>Pesticide Action Network</td>
</tr>
<tr>
<td>PCBs</td>
<td>Polychlorinated Biphenyls</td>
</tr>
<tr>
<td>PFCs</td>
<td>Perfluorinated chemicals</td>
</tr>
<tr>
<td>POPs</td>
<td>Persistent Organic Pollutants</td>
</tr>
<tr>
<td>PRTRs</td>
<td>Pollutant Release and Transfer Register</td>
</tr>
<tr>
<td>QSP</td>
<td>Quick Start Programme</td>
</tr>
<tr>
<td>REACH</td>
<td>Restriction of Chemical Substances European Union</td>
</tr>
</tbody>
</table>
SADC  Southern Africa Development Community
SAEDA  Sustainable Agriculture and Environment Development Association
SAICM  The Strategic Approach to International Chemicals Management
SDG   Sustainable Development Goal
SME   Small and Medium-sized Enterprises
SPREP  Secretariat of the Pacific Regional Environment Programme
UNCED United Nations Conference on Environment and Development
UNDP  United Nations Development Programme
UNEA  United Nations Environment Assembly
UNEP  United Nations Environment Programme
UNIDO United Nations Industrial Development Organization
WEOG  Western Europe and Others Group
WHO   World Health Organization
XBF   Extra-budgetary funds
INTRODUCTION

1. The Strategic Approach to International Chemicals Management (SAICM) is a policy framework aimed at promoting the sound management of chemicals throughout their lifecycle\(^2\), and particularly to achieve the 2002 Johannesburg goal agreed at the World Summit on Sustainable Development, that “by 2020, chemicals are produced and used in ways that minimize significant adverse impacts on human health and the environment”. SAICM is not legally binding but builds international cooperation and bridges international and national policy, as chemicals and hazardous waste have significant local impacts. It also bridges the responsibilities and opportunities of all relevant stakeholders, including governments, industry and civil society.

2. SAICM is broad in its remit and approach through its focus on the entire scope of chemicals management. That is, it addresses the majority of chemicals including all agricultural and industrial chemicals (as well as the focused lists of chemicals from, for example, the Stockholm and Rotterdam Conventions); and all aspects of the chemical lifecycle, from generation to use and disposal, including the generation, management and illegal traffic of hazardous waste. The involvement of many sectors and stakeholders are interconnected in SAICM.

3. SAICM aims to coordinate, catalyse and facilitate action to improve management of chemicals and hazardous waste at all levels. It is a multi-stakeholder and multi-sectoral forum that is governed by a series of ‘SAICM Documents’ composed of:
   - Dubai Declaration;
   - Overarching Policy Strategy;
   - Global Plan of Action;
   - Resolutions adopted by the International Conference on Chemicals Management (ICCM), including the ICCM4 resolution welcoming the Overall Orientation and Guidance (OOG) for achieving the 2020 goal of sound management of chemicals;
   - Other relevant documents, including those from subsidiary bodies (e.g. meeting reports), as appropriate.

4. The Global Plan of Action, while not a consensus document, helps inform the activities of SAICM stakeholders.

5. These “documents” all relate to the target date of 2020 as provided for by the Johannesburg World Summit on Sustainable Development. It is evident that, in the face of a rapidly growing and expanding production and use of chemicals and generation of hazardous waste, the challenges of sound management of chemicals and waste become more pressing and remain a priority for action in getting to and beyond 2020. This is especially so in developing countries and countries in transition that have experienced a significant increase in chemical production and use, and will continue to do so over the coming decades.

OBJECTIVE

6. The objective of the evaluation is to provide an analysis of SAICM activities from 2006-2015 to support the intersessional process of the ICCM to develop recommendations and to enable ICCM5 to take an informed decision on future arrangements for the Strategic Approach and the sound management of chemicals and waste beyond 2020.

\(^2\) See, in particular Dubai Declaration paragraphs 25 & 26
7. The evaluation, where appropriate, draws on lessons learned with respect to the implementation of the Strategic Approach, including:
   - Impact of the Strategic Approach;
   - Strengths, weaknesses and gaps in implementing the Strategic Approach, taking into account the eleven basic elements identified in the Overall Orientation and Guidance;
   - Institutional arrangements within the voluntary multi-sectoral and multi-stakeholder approach of the Strategic Approach.

BRIEF HISTORY

8. The emergence of the sound management of chemicals on the international agenda can be traced back to the publication, in 1962, of Rachel Carson’s groundbreaking book *Silent Spring*. In her book Carson highlighted the significant detrimental impact that the indiscriminate spraying of DDT was having on the environment.\(^3\)

9. Carson’s book is widely attributed to the birth of the modern environmental movement and the subsequent banning of the use of DDT in the USA in 1972.\(^4\) Carson’s work, in part, prompted many countries to establish environment ministries and environmental protection agencies.\(^5\)

10. Over the course of the 1970s and 1980s, a number of events took place that further highlighted the need for sound chemicals management. Four notable examples that had a significant influence in raising the profile of (un)sound chemicals management and emphasising its importance for the global community, regional groups and nation states were:
   - Seveso (Italy, 1976): release of dioxin gas from a chemical manufacturing plant affected residents from neighbouring communities. Studies have revealed incidences of skin lesions, higher incidences of cardiovascular and respiratory diseases, and diabetes within the affected communities. Exposure of pregnant women to the dioxin release has been found to be linked to lower sperm counts in their male children. This disaster promoted the European Commission to adopt legislation – the Seveso Directive – on the prevention and control of such accidents.\(^6\)
   - Love Canal (New York, 1978): leaching of chemical waste from a landfill into elementary school grounds built on the landfill was linked to birth defects and heightened risk of leukemia among local residents.\(^7\) This incident shaped grassroots environmental activism highlighting the links between marginalised/ disempowered communities and exposure to chemicals.\(^8\) At the federal level this incident prompted Congress to pass the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – or Superfund Act. As well as levying a tax on the chemical and petroleum industries and granting federal authority for dealing with hazardous waste sites, the Act established a national priorities list of chemical waste sites for decontamination.\(^9\)
   - Bhopal (India, 1984): leaking of poison gas from a Union Carbide pesticides plant killed at least 3,800 people immediately, morbidity and premature death for thousands of others. The

---

\(^3\) Carson, R; Darling, L; Darling, L (1962) *Silent Spring*, Riverside Press, Cambridge, Mass


\(^5\) IPEN (2014) An NGO Guide to SAICM.


\(^9\) EPA (2018) Superfund: CIRCLA overview

\(^10\) Union Carbide was acquired by Dow Chemical in 2001.
Bhopal disaster prompted the Government of India to create the Ministry of Environment and Forests in 1985. This Ministry was delegated responsibility for administering and enforcing environmental laws in India. However, according to the UN’s special rapporteur on hazardous substances and wastes, the victims of the incident are yet to see “any semblance of an effective remedy and accountability for a preventable disaster now more than 30 years old”.

- Koko (Nigeria, 1988) Throughout the 1980s radioactive, toxic and hazardous waste was exported to Africa. One case that made international news was that of the export from Italy of mixed chemical waste, including of highly toxic PCBs, to the river port of Koko in Nigeria. The waste was stored in drums that leaked. Reports of premature births and deaths from contaminated rice followed. Amidst the international outcry, the waste was removed and finally incinerated in the UK. Following the Koko incident and many others, the UN drew up plans to regulate the trade in hazardous waste through the Basel Convention.

11. The international community’s efforts to address the sound management of chemicals, and more recently of chemicals and waste, have been reflected in numerous UN initiatives, including:

1921: ILO’s White Lead (Painting) Convention (No.13) – Convention concerning the use of white lead in painting; entered into force in 1923.

1948: The first World Health Assembly created an expert committee and a section in the Secretariat to work on environmental sanitation (which included work on, air pollution, water quality, food standards, pesticide safety, and occupational health).

1964: WHO Expert Committee report ‘Environmental change and resulting impacts on health’


1980: International Programme for Chemical Safety (IPCS) – a cooperative programme of the WHO, UNEP and ILO – established following the UN Conference on the Human Environment (1972). Hosted by the WHO, this programme aimed to establish the scientific basis for the sound management of chemicals, and to strengthen national capabilities and capacities for chemical safety. UNEP withdrew from this Programme and today, it remains an initiative of WHO and ILO.

---


1989: Basel Convention on Transboundary Movement of Hazardous Wastes and their Disposal – was adopted in response to a public outcry following the discovery, in the 1980s, in Africa and other parts of the developing world of deposits of toxic wastes imported from abroad. The Convention came into force in 1992. Its principal aims are to control the transboundary movement of hazardous wastes and promote environmentally sound waste management.\(^{17}\)


1991: Bamako Convention on the ban on the import of all hazardous and radioactive wastes into Africa and to minimize and control of transboundary movements of hazardous wastes within the African continent; entered into force in 1998. The impetus for the Bamako convention arose, in part, from the failure of the Basel Convention to prohibit trade of hazardous waste to less developed countries as evidenced by the Koko case in Nigeria (see paragraph 10 above).\(^{18}\)

1992: Agenda 21 Chapter 19 – laid out the plan of action to ensure the environmentally sound management of toxic chemicals, including prevention of illegal international traffic in toxic and dangerous products, agreed at the UN Conference on Environment and Development (UNCED) – the Earth Summit.\(^{19}\) (The six programme areas of work defined by the plan of action are reflected in SAICM.)


1994: The Intergovernmental Forum on Chemical Safety (IFCS) was established. Its first meeting was in April 1994 at the International Conference on Chemical Safety, convened by the Executive Heads of UNEP, ILO and WHO, at the invitation of the government of Sweden. The IFCS had a non-institutional arrangement whereby representatives of Governments met, together with intergovernmental and non-governmental organizations, to consider all aspects of the assessment and management of chemicals. The aim was to integrate and consolidate national and international efforts to promote the objectives of Chapter 19 of Agenda 21. The IFCS was established to provide policy guidance, identify priorities, develop strategies and, where appropriate, make recommendations to Governments, international organizations, intergovernmental bodies and non-governmental organizations involved in chemical risk assessment and environmentally sound management of chemicals. Meetings of the IFCS laid much of the foundation to develop the Strategic Approach.

1995: The Inter-Organization Programme for the Sound Management of Chemicals (IOMC) was established following recommendations made by the 1992 UN Conference on Environment and Development. The participating organizations are the UN Environment Programme (UNEP), the International Labour Organization (ILO), the Food and Agriculture Organization (FAO), the World Health Organization (WHO), the United Nations Industrial Development Organization (UNIDO), , the Organization for Economic Cooperation and Development (OECD) and the United Nations Institute for Training and Research (UNITAR) (joined in 1997). The purpose of the IOMC is to promote coordination of the policies and activities pursued by the participating organizations, jointly or separately, to achieve the sound management of chemicals in relation to human health and the environment. It is guided by a Memorandum of Understanding written in 1995 and signed by the executive heads of each of the participating


\(^{18}\) https://www.unenvironment.org/explore-topics/environmental-governance/what-we-do/strengthening-institutions/bamako-convention

organizations. The World Bank and the United Nations Development Program (UNDP) joined in 2010 and 2012, respectively.

1998: Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides – places a duty on those countries exporting banned or restricted hazardous chemicals and pesticides to fully inform and request permission from the importing country about the trade and to provide full information about the hazardous chemicals/pesticides.

2000: The Millennium Development Goals (MDGs), adopted at the September 2000 Millennium Summit, defined targets to be realised by 2015 aimed at reducing poverty, hunger and disease amongst others. Whilst the sustainable management of chemicals was not explicitly referred to in any of the targets or goals, UNDP inferred the importance of chemicals management in achieving the goals.

2001: Stockholm Convention on Persistent Organic Pollutants – prohibits, production, use, export and import of different categories of Persistent Organic Pollutants (POPs), requires measures to reduce or eliminate releases from stockpiles and wastes, and seeks their ultimate elimination.

2002: World Summit on Sustainable Development – Johannesburg Plan of Implementation – defined the 2020 goal of ‘aiming to achieve, by 2020, that chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment’. This goal is the overall objective of SAICM.

2006: Strategic Approach to International Chemicals Management (SAICM) is finalized with a ministerial declaration that declares that the sound management of chemicals is essential to achieve sustainable development, including the eradication of poverty and disease, the improvement of human health and the environment and the elevation and maintenance of the standard of living in countries at all levels of development.

2007: WHO International Health Regulations entered into force – aiming to help the international community prevent and respond to acute public health risks that have the potential to cross borders and threaten people worldwide.

2012: The 2012 Rio+20 Summit on Sustainable Development, which in its outcome document “The Future We Want” addressed in-depth the need to ensure the sound management of chemicals and waste, including in its paragraph 213 the reaffirmation of “our aim to achieve, by 2020, the sound management of chemicals throughout their life cycle and of hazardous waste in ways that lead to the minimization of significant adverse effects on human health and the environment”.

2013: Minamata Convention on Mercury – bans the creation of new mercury mines and regulates the phase-out of existing ones; the phase out and phase down of mercury used in a range of products and processes; control measures on emissions to air and on releases to land and water; requires governments to regulate the informal sector of artisanal and small-scale gold mining. The convention entered into force in 2017.

2015: Sustainable Development Goals (SDGs) – Chemicals management is embedded throughout the SDGs and, is mainstreamed into the goals. A review of the targets associated with each SDG reveals the pervasiveness of the sound management and chemicals and waste in the

20 https://www.who.int/iomc/participants/iomc-mou.pdf
2030 agenda as well as the centrality of ensuring vulnerable groups are ‘not left behind’. Target 12.4 of the SDGs, which contains the commitment “By 2020, (to) achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment”. The 2020 goal contained in SDG target 12.4 reflects the evolution of multilateral commitment from the Johannesburg Plan of Action goal to the Rio+20 The Future We Want 2020 goal and most recently the 2020 goal contained in the 2030 Agenda. This evolution has also been reflected in ICCM resolutions, including the objective contained in ICCM resolution IV/4 for ICCM “to take an informed decision on future arrangements for the Strategic Approach and of the sound management of chemicals and waste beyond 2020.”

**SCOPE, METHODS AND THEORY OF CHANGE APPROACH**

12. The terms of reference for the evaluation are set out in the Annex to ICCM resolution IV/4.26

13. SAICM is an international, multi-stakeholder non-legally binding agreement defined in the Dubai Declaration and developed through resolutions of the International Conference on Chemicals Management. Government delegates from 117 countries (plus observers from 27 countries)27, together with representatives from Inter-Governmental Organizations (IGO), the chemical producing industry and civil society undertook to actively promote and further the sound management of chemicals through the adoption of the Overarching Policy Strategy (OPS). The OPS articulates the scope and objectives of SAICM together with financial considerations and institutional arrangements for implementation and monitoring progress.28

**Institutional arrangements within the voluntary multi-sectoral approach of the Strategic Approach**

14. The SAICM institutional structure and stakeholders are shown in Figure 1 below. The Figure depicts the institutional relationships described in paragraph 15-28 below.

*Figure 1: SAICM Institutional structure (2006-2015)*

25 It has been pointed out that a significant difference between the SAICM overall objective and target 12.4, is that the latter has broadened the scope from minimising significant adverse effects, to that of minimising all adverse impacts (Honkonen, T; Khan, SA (2017) Chemicals and Waste Governance Beyond 2020: Exploring Pathways for a Coherent Global Regime. Nordic Council of Ministers.

26 SAICM/ICCM.4/15 pp. 49-50

27 SAICM/ICCM.17, paragraphs 16 & 17.

15. The International Conference on Chemicals Management (ICCM) convenes regularly (every three years until 2015) and brings together all stakeholders. The Conference represents the decision-making body of SAICM (see Figure 2 below).

16. The SAICM Bureau comprises five government representatives, one from each region (endorsed at each Conference): Africa, Asia-Pacific, Central and Eastern Europe, Western Europe and Others Group, and Latin America and the Caribbean. The Bureau members are typically representatives from the ministries of environment or foreign affairs. One Bureau member serves as President with the other four members serving as vice-presidents. In addition to these five Bureau members, an additional five Government representatives are invited to participate in Bureau meetings – the regional focal points. The regional focal points role is set out in ICCM resolution II/2 including: chairing regional meetings, disseminating information of interest to focal points within their region, collecting views from Strategic Approach national focal points on matters of interest to the region, and assisting in the flow of information and views from the region to its respective Bureau member.29

17. In light of the multi-stakeholder character of the Strategic Approach, the President of the Bureau invites four representatives of non-governmental participants and one representative of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) to participate in the discussions during the meetings of the Bureau for the purpose of advising and responding to the Bureau, unless the Bureau decides that part or all of its meeting shall be limited to governmental participants. The four non-government representatives represent the health sector, labour, civil society (public interest groups represented by an IPEN participating organization since ICCM1) and the chemical producing industry (represented by ICCA since ICCM1). Their role is to advise the Bureau on the views and perspectives of the stakeholders that they represent.

18. All SAICM representatives – Government and non-government alike – have served, until 2015, a three-year term with nominations of new representatives for each stakeholder group endorsed at each ICCM.

19. The SAICM Secretariat serves the International Conference, Bureau meetings and intersessional meetings, as well as regional meetings where appropriate (see Figure 2, below). It is responsible for stakeholder coordination and has reporting duties. The duties of the Secretariat are laid out in paragraph 28 of the Overarching Policy Strategy:

---

29 SAICM/ICCM.2/15, p. 32, paragraph 9
To facilitate meetings and intersessional work of the Conference [ICCM], as well as regional meetings, with maximum multi-stakeholder participation, and to disseminate the reports and recommendations of the Conference;

To report to the Conference on the implementation of the Strategic Approach by all participants;

To promote the establishment and maintenance of a network of Strategic Approach stakeholders at the national, regional and, in the case of intergovernmental and non-governmental organizations, international levels;

To facilitate the development and dissemination of guidance materials to support implementation of the Strategic Approach by stakeholders;

To provide guidance to stakeholders in the initiation of project proposals;

To provide information clearing-house services such as provision of advice to countries on implementation of the Strategic Approach, referral of requests for information to relevant sources and facilitation of access to information and expertise in support of specific national actions;

To ensure that recommendations from the Conference are conveyed to relevant global and regional organizations and institutions;

To promote the exchange of relevant scientific and technical information;

To establish and maintain a working relationship with participating organizations of IOMC in order to draw upon their sectoral expertise.

20. In addition to the activities listed above, the Secretariat was also mandated to facilitate the operation of the SAICM Quick Start Programme (QSP), in accordance with its agreed term:30

- Provide administrative support to the QSP trust fund;
- Receive project proposals and screen them before submitting them to the QSP trust fund Implementation Committee; and,
- Facilitate meetings of the QSP trust fund Implementation Committee and the QSP Executive Board.

21. A thirteenth activity was added to the project’s mandate in the original project document:31

- Administration of the Information Exchange Network on Capacity-Building for the Sound Management of Chemicals INFOCAP32, as part of the development of the information clearing house.

22. National government focal points from all five regions are the conduit by which SAICM is implemented at the national level. Governments have been invited by the SAICM Secretariat to designate a national focal point. These have been predominantly representatives from the ministries of environment (80%+), with the remaining representatives coming from ministries of health, agriculture and foreign affairs. The SAICM Overall Policy Strategy, in its paragraph 23, provides the role of national focal points.

23. The IOMC, a co-convenor of the first international conference (ICCM1 in 2006), has played a key role in the implementation of SAICM through its capacity-strengthening programmes designed to support countries in the Africa, Asia-Pacific Central and Eastern Europe and Latin America and the Caribbean regions to implement SAICM. IOMC Participating Organizations (IOMC POs) delivered this support through their sectorial work and their role as executing agencies on the QSP projects, supporting development of project proposals, and providing online chemicals management tools.

30 SAICM Secretariat Original Project Document (2006), p 12
31 SAICM Original Project Document (2006), p 12
32 See https://old.saicm.org/images/saicm_documents/infocap.htm
24. The NGO focal points support the implementation of SAICM at the national level. Civil society and health and labour sector and scientific sector NGOs play an important role in the implementation of SAICM through their work in activities such as: seeking reforms in national, state and provincial chemicals-related policies, laws and regulations; campaigning to end industrial polluting practices and to highlight the presence of toxic chemicals in children’s toys; campaigning for the establishment of national pollutant release and transfer registries (PRTRs); seeking to end the misuse and reliance on pesticides in agriculture; monitoring human blood for toxic chemicals and to publicise results; opposing improper waste disposal, and promoting waste minimisation; advocating on behalf of workers, farmers and fishing communities to protect against chemical exposure and chemical hazards in the workplace, defining the principles of green chemistry, the assessment of the hazards of nanomaterials and the creation of education and information exchange for various groups of people and industry.

25. The chemical producing industry plays a role in supporting the implementation of SAICM through its promotion of the Responsible Care programme and Globally Harmonized System of Classification and Labelling of Chemicals (GHS) implementation. The crop protection industry also provides training and capacity-building for regulators and for farmers in pesticide management. Container management of pesticides and contributions to programmes to deal with obsolete stocks of pesticides are part of industry’s support of SAICM, although the scale of the problem is large and much remains to be done. Industry works closely with IOMC members and supports them in chemicals management programmes, through the production of online chemical management tools. In support of SAICM, the pharmaceutical industry has developed an environmental management approach – Eco-Pharmaco-Stewardship – aimed at environmental risk assessments.

26. The joint Basel, Rotterdam and Stockholm (BRS) secretariat is responsible for preparing and servicing the meetings of the conferences of the parties to the BRS conventions and their subsidiary bodies, to receive and convey information related to implementation of the BRS conventions to assist or facilitate assistance to parties upon request and to coordinate with other international bodies as appropriate. The goals of the three conventions broadly aim to protect human health and the environment from chemicals and waste and promote sustainable development, as does the SAICM goal. These secretariats collaborate with the SAICM secretariat in their respective work through sharing information, hosting joint events, and participating in each other’s activities as appropriate. The BRS secretariat provides inputs to relevant SAICM processes in areas of common interest.

27. The QSP was designed as a voluntary, time-limited programme to fund projects that “support activities to enable initial capacity building and implementation in developing countries, least developed countries, and small island developing States and countries with economies in transition”. The QSP Executive Board provided oversight and accountability for the QSP trust fund. The Board comprised two government representatives from each of the five UN regions and all the bilateral and multilateral donors and other contributors to the programme.

28. The QSP trust fund Implementation Committee was the body responsible for reviewing and selecting proposals and monitoring performance. The committee was comprised of representatives from each of the IOMC organizations.

34 SAICM/ICCM.5/Bureau.1/3
37 The Minamata Convention that entered into force in 2017. As with the BRS Secretariat, the Minamata Secretariat will collaborate with the SAICM Secretariat.
Management of the Strategic Approach

29. The stakeholders listed in Figure 1 have been collectively responsible for the delivery of SAICM over the 2006-2015 period. The SAICM secretariat has played a central role in supporting and enabling stakeholders to deliver on their commitments under SAICM.

30. Figure 2 below shows the timeline of the SAICM process – the three-yearly conferences and the events that took place between them until 2015. The management and delivery of the SAICM process (i.e. the events/activities depicted in Figure 2) were primarily the responsibility of the SAICM Secretariat, located within the Chemicals and Health Branch of UNEP.\(^{38}\)

31. In 2006, the first Conference (ICCM1) was convened, attended by government delegates from 177 countries (plus observers from 27 countries), together with representatives from Inter-Governmental Organizations (IGO), industry and civil society.\(^{39}\) ICCM1 resulted in the Dubai Declaration, the Overarching Policy Strategy, the Global Plan of Action and the adoption of resolutions that included the implementation arrangements (the ToR for the SAICM Secretariat), and the institutional arrangements for the Quick Start Programme.\(^{40}\)

32. The Open-Ended Legal and Technical Working Group (OELTWG) was convened at ICCM1 with the purpose of developing a proposal for the rules of procedure of the Conference, to be presented for consideration at ICCM2.\(^{41}\) The OELTWG met in Rome 21-24 October 2008.\(^{42}\) The rules of procedure were accepted at ICCM2 and were spelt out in Resolution II/1. The rules covered stakeholder definitions and participation, setting of ICCM agendas, the officers and operation of the Bureau, the role of the secretariat, establishment of subsidiary bodies and the process of decision-making.\(^{43}\)

33. The Open-Ended Working Group (OEWG) was established as a subsidiary body at ICCM2 with the purpose of preparing proposals to further the 2020 goal, reviewing the outcomes of regional meetings, identifying priority issues and drafting resolutions for consideration at ICCM.\(^{44}\) The OEWG convened one meeting between each ICCM (as reflected in paragraph 4, Resolution II/6). These meetings were held 15-18 November 2011 and 15-17 December 2014.\(^{45}\)

34. The SAICM Bureau, mandated at ICCM2 to meet as required – remotely or in person – to advise the President (of the Bureau) and the SAICM secretariat on the conduct of SAICM business, convened two teleconferences in 2009, in preparation for ICCM2, two meetings in 2010 and 2011, in preparation for ICCM3, and three meetings in 2013, 2014 and 2015 in preparation for ICCM4.\(^{46}\)

35. The Overarching Policy Strategy envisaged regional meetings as an essential component of the implementation of the Strategic Approach within the regions, specifically to:

(i) Review progress on implementation of SAICM;
(ii) Provide guidance in implementation to stakeholders;

\(^{38}\) The overall objective of the Secretariat as stated in the original Secretariat project document was “… to maximise the number of countries and stakeholders participating in the implementation of SAICM by providing the necessary secretariat services called for in paragraph 28 of the Overarching Policy Strategy and ICCM Resolution I/4” (original project document, p.10).

\(^{39}\) SAICM/ICCM.1/7, paragraphs 16-20 for a complete list of representatives.

\(^{40}\) SAICM (2006) Strategic Approach to International Chemicals Management: SAICM texts and resolutions of the International Conference on Chemicals Management. UNEP, WHO.

\(^{41}\) Report of the International Conference on Chemicals Management on the work of its first session. SAICM/ICCM.1/7, paragraph 9.

\(^{42}\) See SAICM/ICCM..2/2 for the report of the OELTWG meeting.


\(^{44}\) SAICM/ICCM.2/15, Resolution I/6.

\(^{45}\) For report of OEWG1, see SAICM/OEWG.1/19. For report of OEWG2, see SAICM/OEWG.2/13*

\(^{46}\) See https://old.saicm.org/index.php?option=com_content&view=article&id=79&Itemid=482 for minutes of these meetings.
(iii) Enable discussions and exchange of information to take place.47

36. Over the period 2006-2015 five meetings took place in the Africa Region, The Central and Eastern Europe Region and the Western Europe and Others Region, and four meetings took place in the Latin America and the Caribbean Region and Asia-Pacific Region (see Figure 2).48

37. The Quick Start Programme Implementation Committee convened six monthly meetings to review applications, monitor progress of funded projects and report to the Quick Start Programme Executive Board. The Executive Board met annually over the period 2006-2015 (see Figure 2).49

38. The SAICM Secretariat, hosted in UNEP’s Chemicals and Health Branch in Geneva, played a central management role in ensuring the coordination and smooth operation of the SAICM institutions presented in Figure 2. (The specific functions of the Secretariat are presented in paragraph 19 above.)

48 See https://old.saicm.org/index.php?option=com_content&view=article&id=98&Itemid=492 for the meeting reports
**Theory of Change**

39. The Theory of Change maps the pathways by which SAICM seeks to deliver on the overall objective ‘to achieve the sound management of chemicals throughout their life-cycle so that, by 2020, chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment’.

40. No Theory of Change was constructed at the outset of SAICM in 2006. The Theory of Change presented in this section has been developed from the original SAICM texts and resolutions. Figure 3 depicts the Theory of Change for this evaluation.

41. The outputs from the SAICM process were the resolutions, procedures and modalities agreed upon at the conferences – ICCM1, ICCM2, ICCM3 and ICCM4. These outputs arose as a direct consequence of the activities undertaken – the Conference, associated Bureau meetings, and intersessional meetings (Open Ended Working Group and Regional meetings). Successful completion of these activities was expected to result in the delivery of the outputs shown in Figure 3.

42. The outcomes that were assumed to arise from successful completion of the outputs were – the delivery of the portfolio of QSP projects, delivery of the initiatives agreed upon for each emerging policy issue and an effective monitoring system for tracking progress in achieving the 2020 goal.

43. The realization of the SAICM outcomes depended on a number of drivers – that is factors that would influence the success in achieving the outcomes that were under the sphere of influence of the SAICM stakeholders. These were: the capacity of the secretariat to deliver on its functions;


51. The Theory of Change framework employed for the SAICM impact evaluation has been adapted from the UN Environment’s framework, see UN Environment Evaluation Office (2018) Introduction to Theory of Change.
information sharing and collaboration between stakeholders; adequate financing available to deliver the outcomes.

44. The outputs and outcomes were the direct remit of SAICM and its stakeholders (shown in Figure 1). The wider goals of SAICM are shown in Figure 3 – Intermediate State I, Intermediate State II and Impact. SAICM, as an international voluntary agreement, was envisaged to contribute to these wider goals, with the recognition that SAICM’s contribution was one part of the broader international community’s efforts to achieve these goals. This evaluation also addresses how effective SAICM has been in contributing to these goals.

45. Successful realisation of the outcomes directly contributes to the achievement of Intermediate State I: strengthened capacity, commitment, technical and scientific knowledge, political will to implement and mainstream the sound management of chemicals and waste. However, a significant driver enabling SAICM outcomes to contribute to Intermediate State I is the ability and capacity of National Focal Point to “…act as an effective conduit for communication on Strategic Approach matters…” and “…to facilitate communication, nationally and internationally…”

46. With strengthened capacity, commitment, technical and scientific knowledge, as well as the political will to implement and mainstream SAICM (Intermediate State I), SAICM stakeholders will be in a position to contribute to the five OPS five objectives of risk reduction, knowledge and information sharing, governance, capacity-building, illegal international traffic – Intermediate State II. The overall impact presented in the Theory of Change is the 2020 goal. Delivering on the five OPS objectives will contribute to the realization of the 2020 goal.

47. Typically, the timeline presented in a Theory of Change extends well beyond the initial project intervention and the delivery of the project’s outputs and outcomes. The intermediate states and overall impact may occur several years after the completion of the project. In the case of SAICM, the intermediate states and overall impact were envisaged to be achieved during the lifetime of SAICM.

48. The structure of the sections that follow are aligned with the pathways presented in the Theory of Change (Figure 3). The next section describes the outputs – the resolutions, procedures and modalities of SAICM (paragraph 51 to paragraph 123 of this report). This is followed by an analysis of the outcomes – the EPIs, the QSP and monitoring progress (paragraph 124 to paragraph 183). An assessment of the drivers of change – capacity of SAICM secretariat, levels of financing and degree of information sharing and collaboration – is then made (paragraph 184 to paragraph 212). The data used to inform this part of the evaluation has been drawn primarily from SAICM documents and reports, and reports produced by SAICM stakeholders.

49. Analysis of progress made in strengthening capacity, commitment, technical knowledge, political will to implement and mainstream SAICM (Intermediate State I) (paragraph 213 to paragraph 282) is drawn from interview data with National Focal Points. This is followed by an assessment of the capacity of National Focal Points to deliver on their role (paragraphs 283 to 302). Interviews with NFPs provide the data for this assessment.

50. Assessment of progress made in achieving the five OPS objectives (Intermediate State II) (paragraph 301 to paragraph 375) is drawn from data the online survey with SAICM stakeholders and a review of SAICM reports and documents, as well as SAICM stakeholder reports, UN reports and academic articles. Assessment of the degree to which the 2020 goal has been reached (paragraph 378 to paragraph 392) is based on NFP interviews and the literature. The overall conclusions of the evaluation are presented (paragraph 394 to paragraph 438).

52 SAICM/ICCM.1/7, p. 25, paragraph 23
OUTPUTS, OUTCOMES AND IMPACTS OF SAICM

Outputs: Resolutions, Procedures and Modalities

51. The resolutions agreed at each Conference (see Figure 2 above) represent a main output of SAICM. Table 1 below lists the resolutions endorsed at each Conference – ICCM1 to ICCM4.

ICCM1

52. One hundred and fifty-four Governments were represented at ICCM1, together with representatives from 20 intergovernmental organizations and 45 non-government organizations.53

53. The Dubai Declaration, the Overarching Policy Strategy and the Global Plan of Action were agreed at ICCM1. The overall objective of SAICM articulated in the Overarching Policy Strategy was to: achieve the sound management of chemicals throughout their life cycle so that, by 2020, chemicals are used and produced in ways that lead to the minimisation of significant adverse effect on human health and the environment. The overall objective had five components:

- Risk reduction
- Knowledge and information
- Governance
- Capacity-building and technical cooperation
- Illegal international traffic

54. Section V of the Overarching Policy Strategy described the financial aspects of SAICM. As a voluntary international agreement, achieving SAICM objectives were dependent on voluntary financial contributions. Section V provided a range of suggestions as to how financial resources could be leveraged. These included:

- Integrating SAICM objectives in relevant programmes and plans;
- Assessing and adopting economic instruments intended to internalise the external costs of chemicals;
- Strengthening current voluntary industry initiatives;
- Developing new initiatives and partnerships with foundations, academia and non-governmental organizations;
- Provision of in-kind contribution;
- Donors responding to requests from developing countries;
- UN agencies and other intergovernmental organizations including SAICM objectives within their activities;
- Making more effective use and building upon existing sources of relevant global funding;
- Establishing the QSP;
- Governments and other stakeholders, including industry and non-governmental organizations, providing resources to enable the secretariat to fulfill its mandated functions set out in paragraph 28 of the OPS.54

53 SACIM/ICCM.1/7 paragraphs 16-20
54 SAICM Overarching Policy Strategy paragraph 19
### Table 1: ICCM Resolutions

<table>
<thead>
<tr>
<th>ICCM1</th>
<th>ICCM2</th>
<th>ICCM3</th>
<th>ICCM4</th>
</tr>
</thead>
<tbody>
<tr>
<td>I/1: Implementing arrangements</td>
<td>II/1: Rules of procedure of the International Conference on Chemicals Management</td>
<td>III/1: Financial and technical resources for implementation of the Strategic Approach</td>
<td>IV/1: Implementation towards the achievement of the 2020 goal</td>
</tr>
<tr>
<td>I/2: Tribute to the Government of the United Arab Emirates</td>
<td>II/2: Regional activities and coordination</td>
<td>III/2: Emerging policy issues</td>
<td>IV/2: Emerging policy issues</td>
</tr>
<tr>
<td>I/3: Intergovernmental Forum on Chemical Safety</td>
<td>II/3: Financial and technical resources for implementation</td>
<td>III/3: Managing perfluorinated chemicals and the transition to safer alternatives</td>
<td>IV/3: Highly hazardous pesticides</td>
</tr>
<tr>
<td>I/4: Quick Start Programme</td>
<td>II/4: Emerging policy issues</td>
<td>III/4: Strategy for strengthening the engagement of the health sector in the implementation of the Strategic Approach</td>
<td>IV/4: The Strategic Approach and sound management of chemicals and waste beyond 2020</td>
</tr>
<tr>
<td></td>
<td>II/5: Managing perfluorinated chemicals and the transition to safer alternatives</td>
<td>III/5: Indicative budget and staffing table for the period 2013–2015</td>
<td>IV/5: Activities of the secretariat and budget</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>II/6: Establishment of an open-ended working group</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>II/7: Commission on Sustainable Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>II/8: Health aspects of the sound management of chemicals</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>II/9: Intergovernmental Forum on Chemical Safety</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>II/10: Indicative budget, staffing table and programme of work for the period 2010–2012</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

55. The financial considerations of the OPS were a contentious issue at ICCM1. The main area of contention related to the removal of specific references to the World Bank and the GEF in that section. The draft Overarching Policy Strategy had these
two institutions named (in square brackets). One participant opposing their inclusion, argued that these two institutions “… were dedicated to alleviating poverty and should therefore not be specifically mentioned in a scheme for chemicals management.”

56. Many participants objected to the deletion of reference to the two institutions asserting that environmental protection and chemicals management were core to alleviating poverty. They cited Millennium Development Goal 7 on environmental sustainability that explicitly linked environmental protection to sustainable development. Other participants objected to the removal of the World Bank and GEF from ‘financial considerations’. They stressed the need for a reliable and sustainable financial mechanism to underpin activities needed to achieve the 2020 goal.

57. In the event, references to the World Bank were removed from the final agreed Overarching Policy Strategy. However, during the final debate, Switzerland wished it to be noted that its agreement to accept the deletion of references to the World Bank from various parts of the Strategic Approach documents was based on the understanding that the World Bank would be covered by any references to the IOMC once it had joined the IOMC (although the IOMC was not specifically referred to in Section V – financial considerations). The World Bank joined the IOMC four years later in 2010.

58. During the final debate, it was also agreed that the ICCM1 report would reflect the view of some participants, that the possibility of GEF opening a “chemicals window” should be discussed at ICCM2. However, no such discussion took place. (In 2018, the GEF approved an US$ 8.18 million project “Global best practices on emerging chemical policy issues of concern under the Strategic Approach to International Chemicals Management”)

59. Section VII of the OPS – implementation and taking stock of progress – outlined the functions of ICCM and regional meetings. This section also detailed the functions of the secretariat (see paragraph 20 above).

60. The Global Plan of Action comprised 273 activities across the five OPS objectives and work areas. Each activity had associated targets and timeframes, indicators of progress and actors to be involved in their implementation.

61. Resolution I/1 outlined the implementation arrangements for SAICM called upon delegates to participate in SAICM through: designating national and regional focal points, holding regional meetings, providing financial support, technical assistance and training to Governments of least developed countries and small Island developing States. The resolution also invited UNEP and WHO to provide staff and resources to enable them to take lead roles in the SAICM Secretariat, welcoming the offer of UNEP and potential offer from WHO, to provide a professional staff member of the secretariat. The resolution also invited UNEP and IOMC organizations to

---

55 See SAICM/ICCM.1/3
56 SAICM/ICCM.1/7 paragraph 28
57 SAICM/ICCM1.1/7 paragraphs 29 and 30
58 SAICM/ICCM.1/7 paragraph 68
59 SAICM/ICCM.1/7 paragraph 67
60 SAICM/OEWG.3/6, p. 3
61 SAICM/ICCM1.7 pp. 24-26
62 SAICM/ICCM.1/7 pp. 33-93
facilitate the development of the Quick Start Programme. Resolution I/2 paid tribute to the Government of the United Arab Emirates or hosting ICCM1.

62. Notwithstanding the decision of ICCM1 not to formally incorporate the Intergovernmental Forum on Chemical Safety into SAICM, Resolution I/3 invited the Forum to continue its important role in providing an open, transparent and inclusive forum for discussing issues of common interest. The resolution also requested the SAICM secretariat to establish and maintain a working relationship with the Forum in order to draw upon its expertise.

63. Resolution I/4 established the QSP, its institutional arrangements and strategic priorities. The Appendices to this resolution identified the strategic priorities of the QSP and the terms of reference for the QSP Trust Fund. The three strategic priorities were:

- Development or updating of national chemical profiles and the identification of capacity needs for sound chemicals management;
- Development and strengthening of national chemicals management institutions, plans, programmes and activities to implement the Strategic Approach, building upon work conducted to implement international chemicals-related agreements and initiatives;
- Undertaking analysis, interagency coordination, and public participation activities directed at enabling the implementation of the Strategic Approach by integrating – i.e., mainstreaming – the sound management of chemicals in national strategies, and thereby informing development assistance cooperation priorities.

ICCM2

64. One hundred and forty-six Government representatives registered for ICCM2 together with representatives from 25 intergovernmental organizations and 59 representatives of non-governmental organizations.

65. Resolution II/1 focused on the rules of procedure for the ICCM. These rules were drafted and proposed by the OELTWG, established at ICCM1. Forty-six rules covered rules of participation by inter-governmental and non-governmental participants; the setting of the agenda for each conference; representation, credentials and accreditation of participants (governmental, intergovernmental and non-governmental); officers and operation of the Bureau; functions of the Secretariat; subsidiary bodies; conduct of business; adoption of decisions; public and private sessions; languages of the conference; amendments to rules of procedure.

66. The success of the regional meetings held between ICCM1 and ICCM2 led to the adoption of Resolution II/2 that underlined the important role of regional meetings and coordination mechanisms in enabling stakeholders in each region to exchange experiences and identify regional priority needs. The resolution encouraged regions to develop SAICM implementation plans, and further, called for regional organizations, Governments and financial institutions to provide resources – both financial and in kind support – to support regional networks. The resolution also assigned

---

63 ICCM1, Resolution I/1, paragraphs 6-14
64 SAICM/ICCM.1/7 pp. 101-104
65 SAICM/ICCM.2/15 paragraphs 20-26
66 SAICM/ICCM.2/15 pp. 23-31
responsibility to the SAICM Secretariat to assist in regional coordination, including through the provision of teleconference services and use of the SAICM website.\textsuperscript{67}

67. Reflecting the voluntary nature of SAICM, Resolution ll/3 invited all stakeholders to provide funding for the implementation of SAICM. The resolution reiterated the invitation to stakeholders in Section V – financial considerations – of the OPS, to: integrate SAICM objectives in multilateral and bilateral development assistance cooperation to facilitate the allocation of necessary resources at the national, subregional, regional, bilateral and multilateral levels; international financial institutions to build on existing synergies and to strengthen their support for activities contributing to SAICM objectives including through in-kind contributions.

68. Resolution ll/3 also recognised the need to broaden the donor base for the QSP and urged all stakeholders – Government and non-government alike – to contribute to the QSP.

69. The resolution also invited stakeholders to assess the steps that they had taken to implement the financial arrangements called for in this resolution, and to report to the Secretariat in preparation for a review and evaluation of the adequacy of financial arrangement for SAICM implementation at ICCM3.\textsuperscript{68}

70. Resolution ll/4 was aimed at emerging policy issues identified at ICCM2 and deemed to be of sufficient importance and priority for achieving the 2020 goal, whilst not having been generally recognized or sufficiently addressed to date. The four issues identified as such at ICCM2 were: lead in paint, chemicals in products; hazardous substances within the life cycle of electrical and electronic products; nanotechnologies and manufactured nanomaterials.\textsuperscript{69}

71. Addressing the ‘lead in paint’ issue focused on advocating for a global partnership to promote phasing out the use of lead in paints that would adopt terms of reference based on those presented at ICCM2.\textsuperscript{70} The resolution requested that UNEP and WHO serve as the secretariat for the global partnership, and that the partnership developed a business plan articulating clear milestones for progress in achieving a global phase-out of lead in paint in the following areas:

- Raising awareness of toxicity to human health and the environment and alternatives;
- Guidance and assistance to identify potential lead exposure;
- Assistance to industry (manufacturers, wholesalers and retailers);
- Prevention programmes to reduce exposure;
- Promotion of national regulatory frameworks.

72. Addressing the ‘chemicals in products’ issue primarily focused on establishing a project to collect and review existing data on information systems pertaining to chemicals in products (including regulations, standards and industry practices), assessing that information, identifying gaps and developing specific recommendations to address those information gaps. The resolution requested UNEP to lead and facilitate the project, proposing that the information clearing house mechanism (see

\textsuperscript{67} For details of Resolution ll/2 see SAICM/ICCM.2/15 pp. 31-32

\textsuperscript{68} For details of Resolution ll/3 see SAICM/ICCM.2/15 pp. 32-33

\textsuperscript{69} SACIM/ICCM.2/15 pp. 34-40

\textsuperscript{70} SAICM/ICCM.2/10/Add.1
paragraph 19, above) be used for the project. The project was to be overseen by a steering group comprising one expert from each region nominated by the SAICM Bureau, together with four representatives of non-government participants represented on the Bureau and one representative of IOMC. Progress made in the ‘chemicals in products’ project was to be reported at OEWG1 and ICCM3.

73. Resolution ll/4 called for IOMC and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal and the Stockholm Convention on Persistent Organic Pollutants to develop, plan and convene a workshop to consider issues in relation to hazardous substances within the life cycle of electrical and electronic products that would develop a series of options and recommendations for future work. The workshop outcomes were to be shared at ICCM3.

74. In regard to the fourth emerging policy issue agreed at ICCM2, conference invited the OECD, other members of OECD and the International Organization for Standardization to engage in dialogue with stakeholders with a view to gaining further understanding of nanotechnologies and manufactured nanomaterials, in particular, around issues of relevance to developing countries and economies in transition. A report on the progress made to be shared at ICCM3. The resolution requested that SAICM stakeholders facilitate access to relevant information; to share new information as it became available; to use regional meetings to increase understanding of the information available. The resolution also noted for the SAICM website and the information clearing house as mechanisms to facilitate the engagement.

75. The Annex to Resolution ll/4 provided details of the process for proposing new emerging policy issues and the mechanism by which these would become recognised by ICCM as emerging policy issues.

76. Resolution ll/5 arose as a result of ICCM2 failing to come to a consensus that ‘Managing perfluorinated chemicals and the transition to safer alternatives’ should be classified as an ‘emerging policy issue’. An information documented was presented to conference on the dangers to human health and the environment posed by perfluorinated chemicals, with several representatives endorsing the proposal to discuss the issue. However, one representative, speaking on behalf of a group of countries, said that the procedure for identifying emerging policy issues had been bypassed, and to accept the issue for discussion would undermine the agreed procedure. In the event, Resolution ll/5 invited OECD and other IOMC members to establish a stewardship programme aimed at reducing emissions of perfluorinated chemicals of concern in products and to work toward global elimination. The resolution focused on promoting surveys on product content and environmental release of perfluorinated chemicals, together with promoting the exchange of information on current alternatives, potentially safer alternative substances and technologies. As with several of the emerging policy issues, the resolution called for the SAICM secretariat to make information available through the information clearing house (or similar mechanisms).
77. Resolution II/6 established an inter-sessional forum – the open-ended working group – designed to be a subsidiary body to conference, to consider the implementation, development and enhancement of SAICM by:

- Reviewing and prioritizing proposals for emerging policy issues in preparation of the next session of the Conference;
- Continuing discussion on work on emerging policy issues;
- Considering proposals for the inclusion of new activities in the Global Plan of Action;
- Considering initiatives that are being undertaken and addressing progress and gaps in achieving the SAICM goal;
- Considering the outcomes of regional meetings;
- Identifying priority issues for consideration for inclusion in the agendas of the sessions of the Conference.\(^{74}\)

78. At ICCM2 there was some discussion over the role of the Intergovernmental Forum on Chemical Safety within SAICM. The Forum had proposed that it became the advisory body to SAICM. Whilst this proposal received some support, it was rejected. Representatives observed that the Conference itself would provide the sort of body that the Forum had previously.\(^{75}\) The establishment of the open-ended working group effectively ruled out future involvement of the Forum in SAICM (see paragraph 82 below). It is noted that the Forum did not participate in future conferences.

79. The International Union of Pure and Applied Chemistry and the Society of Environmental Toxicology and Chemistry offered to host a scientific meeting a year prior to the ICCM3, enabling a scientific perspective to be incorporated into the Conference’s structure. However, this offer was also rejected, with representatives pointing out that all stakeholders should be included and that one body should not be endorsed over another.\(^{76}\)

80. Resolution II/7 focused on the role of SAICM in facilitating the deliberation of chemicals issues in the work of the Commission for Sustainable Development. The resolution called on both the SAICM secretariat and SAICM stakeholders to participate in the work of the Commission for Sustainable Development. The resolution also invited the Commission to provide information at ICCM3 on its work on the sound management of chemicals.\(^{77}\)

81. Resolution II/8 called on the health sector to participate actively in actions to implement the decisions of ICCM2 in respect of emerging policy issues. It also invited the WHO to intensify its activities in the sound management of chemicals, specifically at regional and country levels, and to strengthen existing information networks and to establish additional ones.\(^{78}\)

---

\(^{74}\) SAICM/ICCM.2/15 p. 41  
\(^{75}\) SAICM/ICCM.2/15 paragraph 146  
\(^{76}\) SAICM/ICCM.2/15 paragraph 112  
\(^{77}\) SACIM/ICCM.2/15 p. 42  
\(^{78}\) SAICM/ICCM.2/15 p. 43
82. Resolution II/9 formalised the decision of ICCM2 not to integrate the Intergovernmental Forum on Chemical Safety into ICCM because of the establishment of the Open-Ended Working Group as a subsidiary of ICCM.79

83. Resolution II/10 approved the indicative budget and staffing structure of the Secretariat for the period 2010-2012 and the secretariat’s work proposed programme. However, the resolution did reiterate that funding for the secretariat was provided on a voluntary basis and that only a limited number of donors had made financial contributions to SAICM. The resolution therefore called on governments and organizations to contribute resources so that the secretariat was able to perform its mandated functions as set out in paragraph 28 of the Overarching Policy Strategy. The resolution further called for the creation of additional posts within the secretariat to support the establishment of the information clearing house, which had been delayed because of resource constraints,80 and the QSP.81

84. In addition to the ten resolutions ICCM2 agreed procedures for the inclusion of new activities in the Global Plan of Action, and modalities for reporting by stakeholders on progress in implementation.

85. The indicators of progress made and the modalities for reporting these indicators were presented. Data for these indicators were to be collected nationally and monitored at the regional and global levels. The indicators were aligned to each SAICM objective and are presented in Table 2. These indicators were designed to monitor progress made at the national level in achieving the SAICM objectives over time.

Table 2: Indicators of Progress82

<table>
<thead>
<tr>
<th>Objective</th>
<th>Indicator of progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk reduction</td>
<td>1. Number of countries (and organizations) implementing agreed chemicals management tools</td>
</tr>
<tr>
<td></td>
<td>2. Number of countries (and organizations) with mechanisms to address key categories of chemicals</td>
</tr>
<tr>
<td></td>
<td>3. Number of countries (and organizations) with hazardous waste management arrangements</td>
</tr>
<tr>
<td></td>
<td>4. Number of countries (and organizations) engaged in activities that result in monitoring data on selected environmental and human health priority substances</td>
</tr>
<tr>
<td></td>
<td>5. Number of countries (and organizations) having mechanisms in place for setting priorities for risk reduction</td>
</tr>
</tbody>
</table>

79 SAICM/ICCM.2/15 p. 44
80 SAICM/ICCM.2/15 paragraph 152
81 SAICM/ICCM.2/15 p. 44
82 SAICM/ICCM.2/15 pp.55-57
<table>
<thead>
<tr>
<th>Knowledge &amp; information sharing</th>
<th>6. Number of countries (and organizations) providing information according to internationally harmonized standards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7. Number of countries (and organizations) that have specific strategies in place for communicating information on the risks associated with chemicals to vulnerable groups</td>
</tr>
<tr>
<td></td>
<td>8. Number of countries (and organizations) with research programmes</td>
</tr>
<tr>
<td></td>
<td>9. Number of countries (and organizations) with websites that provide information to stakeholders</td>
</tr>
<tr>
<td>Governance</td>
<td>10. Number of countries (and organizations) that have committed themselves to implementation of the Strategic Approach</td>
</tr>
<tr>
<td></td>
<td>11. Number of countries (and organizations) with multi-stakeholder coordinating mechanism</td>
</tr>
<tr>
<td></td>
<td>12. Number of countries (and organizations) with mechanisms to implement key international chemicals priorities</td>
</tr>
<tr>
<td>Capacity-building &amp; technical cooperation</td>
<td>13. Number of countries (and organizations) providing resources (financial and in kind) to assist capacity-building and technical cooperation with other countries</td>
</tr>
<tr>
<td></td>
<td>14. Number of countries (and organizations) that have identified and prioritized their capacity-building needs for the sound management of chemicals</td>
</tr>
<tr>
<td></td>
<td>15. Number of countries (and organizations) engaged in regional cooperation on issues relating to the sound management of chemicals</td>
</tr>
<tr>
<td></td>
<td>16. Number of countries where development assistance programmes include the sound management of chemicals</td>
</tr>
<tr>
<td></td>
<td>17. Number of countries (and organizations) with projects supported by the Strategic Approach’s Quick Start Programme Trust Fund</td>
</tr>
<tr>
<td></td>
<td>18. Number of countries (and organizations) with sound management of chemicals projects supported by other sources of funding (not Quick Start Programme funding)</td>
</tr>
<tr>
<td>Illegal international traffic</td>
<td>19. Number of countries having mechanisms to prevent illegal traffic in toxic, hazardous and severely restricted chemicals individually</td>
</tr>
<tr>
<td></td>
<td>20. Number of countries having mechanisms to prevent illegal traffic in hazardous waste</td>
</tr>
</tbody>
</table>
86. Annex IV of the ICCM2 report presented a proposal from the Africa region as to the functions of the National Focal Points. Whilst this proposal was never formally accepted, no subsequent proposal at ICCM3 or ICCM4 was presented or approved. The proposed functions were:

- Establish a national desk for the Strategic Approach to International Chemicals Management with the provision of an annual budgetary allocation;
- Act as an effective conduit for communications on the Strategic Approach at the national and regional levels, and ensure synergies with the focal points of chemicals and wastes-related multilateral environment agreements;
- Establish an inter-ministerial and inter-institutional committee for implementation of the Strategic Approach, including representatives of non-governmental organizations;
- Facilitate Strategic Approach implementation efforts at the national and local levels;
- Solicit and organize input from sectors and actors relevant to the Strategic Approach;
- Establish communication with subregional and regional focal points to facilitate coordination and cooperation in implementation of the Strategic Approach;
- Support the development of regional positions for presentation at sessions of the Conference;
- Facilitate the submission of progress reports to the regional focal point and the Conference on implementation of the Strategic Approach.

ICCM3
87. One hundred and seventeen Government representatives registered for ICCM3 together with representatives from 18 intergovernmental organizations and 72 representatives of non-governmental organizations.

88. Resolution III/1 – financial and technical resources for implementation of the Strategic Approach – built on Section V of the OPS and Resolution II/3 (ICCM2). This resolution extended the timeframe for contributions to the QSP trust fund until ICCM4 (2015) and that all funds committed before the closure of the programme could be disbursed until all approved projects were completed. This was important as it had become apparent by ICCM3 that many approved QSP projects were facing lengthy delays in their completion (see paragraph 191, below).

89. Resolution III/1 also invited the Executive Director of UNEP to finalise his proposal on an integrated approach to the financing of the sound management of chemicals and waste, and called upon SAICM stakeholders to provide their views on his proposal. The resolution also called upon the GEF to consider priorities and activities identified in SAICM in the sixth replenishment of its trust fund. The proposal by the Executive Director envisaged three components of an integrated approach:

---

83 SAICM/ICCM.2/15 p.59
84 SAICM/ICCM.3/24 pp. 5-6
85 SACIM/ICCM.3/24 pp. 32-33
86 See SAICM/ICCM.3/12
• Mainstreaming sound management of chemicals and waste into national development plans
• Industry involvement
• External financing

90. Mainstreaming involves Governments integrating the sound management of chemicals and waste into their development plans and priorities. Specifically, the proposal called for Governments to: become parties to the related conventions and participate in SAICM; regularly update national chemicals and wastes plans; monitor and enforce national environmental health standards and regulations required to meet their international obligations; monitor and enforce compliance by industry with national laws and regulations.

91. Industry involvement was envisaged as meaning that industry internalizes the costs of complying with chemicals and waste regulations, with economic instruments (e.g. taxes and subsidies) used to shift the external costs of production, use and disposal of chemicals away from the public sector to the private sector. Industry involvement was also conceived to involve industry transferring cleaner technology and taking innovative steps to ‘green’ chemicals and wastes throughout their life cycles.

92. External financing was envisaged to involve two components. Firstly, the establishment of national chemicals waste units in all recipient countries, and secondly the creation of an integrated chemicals and wastes focal area under the GEF.

93. The proposal asserted that national chemicals and waste units would enhance capacity in recipient countries, serve as a focal point for the BRS conventions, promote and enhance the mainstreaming of chemicals and wastes into national development plans and priorities, regional development plans, and international development assistance plans. The units would also be responsible for and reporting on industry compliance with legislative, regulatory and administrative requirements.

94. The creation of an integrated chemicals and waste focal area under the GEF, would depend on sustainable, predictable and adequate financing. Such funding would support recipient countries to: prepare for and become a party to existing and future chemicals and waste related conventions; achieve compliance with legal obligations for such conventions; obtain capacity-building support to facilitate mainstreaming and industry involvement at the national level; develop their national chemicals and waste agendas and develop, monitor and enforce the environmental standards and regulations required to effectively implement those agendas.

95. As was the case at ICCM1 (see paragraphs 54-58, above), discussion at ICCM3 about how to finance SAICM was a contentious issue. Whilst some representatives expressed support from the mainstreaming and industry component of the Executive Director’s proposal others expressed their opposition. There was, however, general support for the external financing component of the proposal. The contact group on financial matters, established at ICCM3, reported that there was agreement on the need for long-term financing for SAICM and a shared sense of urgency in this regard. There was a common concern as to how to allocate funding to legally binding obligations as opposed to voluntary commitments (i.e. SAICM) so as to ensure SAICM received sufficient funding. Many recipient countries highlighted the advantages of the QSP model in relation to GEF practices – GEF required co-funding, the QSP did not; GEF funding depended less on recipient priorities, and
rather more on GEF Council decisions and donor priorities. Many representatives highlighted the need to revise areas of the proposal that implied conditionality of funds on mainstreaming. Many also indicated that the roles and responsibilities of industry involvement needed to be expanded and raised in terms of ambition that went beyond the status quo.  

96. Resolution III/2 – Emerging policy issues – built upon resolution II/4. In regard to ‘lead in paint’ the resolution called for Governments to: raise awareness of lead toxicity to human health, ensuring effective assessment of the presence of lead in the consumer paint market and establishing lead exposure pathways for children under six years old, paint users and workers in paint production facilities; provide guidance to identify potential lead exposure, build capacity to conduct blood lead testing and surveillance programmes; promote international certification of new paint products; introduce prevention programmes to reduce exposure, particularly in housing, childcare facilities and schools; promote national regulatory frameworks; encourage companies to substitute lead compounds added to paint with safer alternatives. The resolution supported the Global Alliance’s proposal to establish an international lead poisoning prevention day of action.

97. The resolution called for a ‘chemicals in products’ (CiP) proposal to be developed for a voluntary international programme for information on chemicals in products along the supply chain and throughout their life cycle. The resolution further called for a workshop to discuss the completed proposal.

98. The resolution called for all stakeholders to consider the recommendations made at the international workshop hazardous substances in the life cycle of electrical and electronic products held in Vienna in March 2011. The resolution also resolved to work to create a set of best practice resources that could include:

- Tools that lead to progress in the development of designs that reduce and eliminate the use of hazardous chemicals in production;
- Business standards and practices for tracking and disclosing the presence of hazardous chemicals in the manufacturing, use and end-of-life stages;
- Tools and information on potential safer substitutes for chemicals of concern in product applications;
- Green purchasing strategies of businesses and governments;
- Extended producer responsibility policies of businesses and Governments;
- Provisional strategies and actions in design and manufacturing that should be implemented until elimination is possible or safer substitutes are available.

99. In regard to the EPI – nanotechnologies and manufactured nanomaterials – Resolution III/2 encouraged all stakeholders to facilitate the exchange of information on nanotechnologies and nanomaterials, and recommended the development of international technical and regulatory guidance and training materials. The resolution called for industry to enhance their stewardship role and responsibility as manufacturers of nanotechnologies and nanomaterials and to participate in information exchange. The resolution invited the UN committee of experts on the GHS to review the applicability of the GHS criteria to manufactured nanomaterials and, if necessary to prepare a workplan for adapting those criteria.

87 SACIM/ICCM.3/24 pp. 59-60
88 SAICM/ICCM.3/24 pp. 33-39
100. ICCM3 agreed that international cooperation to build awareness and understanding and promote actions on endocrine-disrupting chemicals was an emerging policy issue. Resolution III/2 called for IOMC to lead the work on this EPI by building on stakeholders’ existing activities to: provide information and expert advice; raise awareness and facilitate scientific information-exchange; provide international support for capacity-building; facilitate mutual research, development of case studies and guidance on translating research into action.

101. Resolution III/3 called for the Global Perfluorinated Chemicals (PFC) Group established by the OECD to broaden its participation beyond the member countries of OECD as a means to further progress work in this area. The resolution also invited the Global PFC Group to collaborate closely with the secretariat of the Stockholm Convention.\(^89\)

102. Resolution III/4 agreed to adopt the strategy on strengthening the engagement of the health sector in the implementation of SAICM. This strategy was developed in response to resolution II/8 at ICCM2.\(^90\)

Resolution III/5 agreed the indicative budget and staffing of the secretariat together with its work programme for the period 2013-2015.\(^91\)

103. ICCM3 agreed the inclusion of new activities relating to the environmentally sound management of nanotechnologies and manufactured nanomaterials and hazardous substances with the life-cycle of electrical and electronic products in the GPA. Thirteen new activities were added to the GPA for nanotechnologies and nanomaterials, and 13 activities for hazardous substances with the life-cycle of electrical and electronic products.\(^92\) These additions brought the total number of activities within the GPA to 289 activities.

104. A paper setting out a draft resolution calling for wider action on Highly Hazardous Pesticides (HHP) was presented.\(^93\) This draft resolution called for ‘a progressive ban on HHPs and their substitution with safer alternatives’.\(^94\) This draft resolution was in keeping with the Dubai Declaration call for concerted action on addressing dependency on pesticides in agriculture and the Global Plan of Action (GPA) global priority to promote alternatives in order to reduce and phase out highly toxic chemicals. Addressing the issue of the environmental and health impacts of highly toxic pesticides was reflected in several activities of the GPA.\(^95\) Whilst there was general agreement that this was an important issue and many representatives expressed support for adoption of the resolution. However, others suggested more work should be done on this issue in preparation for ICCM4. The proposed resolution was rejected. The FAO representative urged all countries not to wait until ICCM4 to act.\(^96\)

\(^{89}\) SAICM/ICCM.3/24 pp. 39-40
\(^{90}\) SAICM/ICCM.3/24 p. 40 and Annex V
\(^{91}\) SAICM/ICCM.3/24 pp. 40-41
\(^{92}\) SAICM/ICCM.3/24 Annex II
\(^{93}\) The term Highly Hazardous Pesticides was first introduced by the FAO
\(^{94}\) SAICM/ICCM.3/CRP.16
\(^{95}\) Dubai Declaration paragraph 6; Global Plan of Action, paragraph 8h; GPA activities 25, 26, 27,29 &114
\(^{96}\) SAICM/ICCM.3/24 paragraphs 194-195
ICCM4

105. One hundred and fifty-eight Government representatives registered for ICCM4 together with representatives from 20 intergovernmental organizations and 93 representatives of non-government organizations. This participation represented the greatest number of Governments, intergovernmental organizations and non-governmental organizations to date.

106. Resolution IV/1 – implementation towards the achievement of the 2020 goal - was a wide reaching resolution that amounted to a call for action across several fronts that would contribute to achieving the 2020 goal. The resolution endorsed the overall orientation and guidance (OOG) for achieving the 2020 goal as a voluntary tool that will assist in prioritizing efforts for the sound management of chemicals. The 11 basic elements that comprised the OOG, listed in Table 3, have been deemed critical at the national and regional levels to attainment of the 2020 goal. The 11 basic elements were envisaged as a monitoring tool to assess progress towards measurable steps at the national level as well a guide to set national priorities and to align activities to the SDGs.

107. The OOG identified six core activity areas required for achieving the five OPS objectives. Namely, to:

- Enhance the responsibility of stakeholders;
- Establish and strengthen national legislative and regulatory frameworks for chemicals and waste;
- Mainstream the sound management of chemicals and waste in the sustainable development agenda;
- Increase risk reduction and information sharing on emerging policy issues
- Promote information access; and,
- Assess progress towards the 2020 goal.

Table 3: Eleven basic elements of the OOG

(a) Legal frameworks that address the life cycle of chemicals and waste.
(b) Relevant enforcement and compliance mechanisms.
(c) Implementation of chemicals and waste-related multilateral environmental agreements, as well as health, labour and other relevant conventions and voluntary mechanisms.
(d) Strong institutional frameworks and coordination mechanisms among relevant stakeholders.
(e) Collection and systems for the transparent sharing of relevant data and information among all relevant stakeholders using a life cycle approach, such as the implementation of the Globally Harmonized System of Classification and Labelling of Chemicals.
(f) Industry participation and defined responsibility across the life cycle, including cost recovery policies and systems as well as the incorporation of

97 SAICM/ICCM.4/15 pp. 5-6
98 SAICM/ICCM.4/6 paragraph 19 & 20 p. 8
99 SAICM/ICCM.4/6 p. 9
sound chemicals management into corporate policies and practices.

(g) Inclusion of the sound management of chemicals and waste in national health, labour, social, environment and economic budgeting processes and development plans.

(h) Chemicals risk assessment and risk reduction through the use of best practices.

(i) Strengthened capacity to deal with chemicals accidents, including institutional-strengthening for poison centres.

(j) Monitoring and assessing the impacts of chemicals on health and the environment.

(k) Development and promotion of environmentally sound and safer alternatives.

A representative from the IOMC drew attention to IOMC’s proposal for 10 simple quantitative indicators for assessing progress in achieving sound chemicals management at the national level. They were:

- Number of countries with National Profiles (UNITAR)
- Number of countries implementing GHS (UNITAR)
- Number of countries with a PRTR (UNITAR)
- Number of countries with Poisons centres (WHO)
- Countries with controls for lead in decorative paint (WHO and UNEP)
- Number of countries that have achieved core capacities for chemicals under the International Health Regulations (WHO)
- Number of countries with pesticide legislation referencing or based on the International Code of Conduct on Pesticide Management
- Number of countries with an effective pesticide evaluation and registration system and/or participating in a regional scheme
- Number of countries taking action to reduce risks from pesticides (e.g. a policy, action to ban problematic pesticides, actively promoting ecological and biological control options, food safety programmes in place etc.)
- Number of parties to the Basel, Rotterdam, Stockholm and Minamata Conventions (BRS Secretariat and Interim Secretariat of the Minamata Convention/UNEP)

108. Resolution IV/1 raised several concerns about the progress made towards achieving the 2020 goal, given the limited time remaining, noting that in most countries more progress had to be made. The resolution also noted that the sound management of chemicals was a resource intensive task and a particular challenge for developing countries and countries with economies in transition. These concerns were compounded by the acknowledgement that the scale of resources available was insufficient to achieve the 2020 goal. The resolution called for SAICM stakeholders and UNEP in particular to pursue additional fundraising initiatives to fund the six core activity areas of the OOG as well as risk reduction activities necessary to achieve the 2020 goal. The resolution also recognized the need for the SAICM secretariat and

100 SAICM/ICCM.4/INF/7 p. 5
regional focal points to provide additional support to national focal points in undertaking the proposed actions within the OOG.

109. The resolution urged all stakeholders to take concerted steps to implement the OOG, encouraged them to achieve concrete risk reduction objectives and to use SAICM as a framework for national action and international cooperation. The resolution reiterated the importance of the inclusion of the sound management of chemicals and waste within national development planning process and poverty reduction strategies.

110. The resolution also recognised the need to deepen and broaden UN system-wide engagement and invited those organizations of the UN Environment Management Group that had not already done so, to issue a declaration signaling their commitment to promote the importance of the sound management of chemicals and waste and to reflect this commitment within the actions planned with their own mandates to meet the 202 goal.

111. In the discussion at ICCM4 over the text of this resolution the UN Special Rapporteur for Human Rights, whilst acknowledging that positive steps had been taken since the Dubai Declaration in 2006, stated that in all countries more work was needed. He highlighted the rights being violated by toxic chemicals included the right to life, the right to the highest attainable standard of health, the right to nutritious food, the right to safe water, the right to information and the right to effective remedies. More strategic actions were needed to narrow critical gaps in the attainment of human rights, particularly among vulnerable groups, including workers, women, children and low-income, minority and marginalised communities and indigenous peoples. Resolving related injustices, he asserted, was integral to achieving the 2020 goal.

112. Resolution IV/2 – emerging policy issues – welcomed the efforts of the Global Alliance to Eliminate Lead Paint and encouraged Governments, civil society and the private sector to participate in the work of the Global Alliance, and to promote effective measures including regulations to phase out the use of paint.

113. The resolution acknowledged progress made in the development of a proposal for a voluntary international and multi-stakeholder program for information on the chemicals in products EPI. The resolution renewed the mandate of the Steering Group and suggested that representation from the recycling sector be included. UNEP was invited, resources permitting, to maintain the website of the chemicals in products programme.

114. During the discussions on the chemicals in products programme at ICCM4, several representatives highlighted the question of information disclosure as a key concern, with some calling for companies to be compelled to identify and disclose information on chemicals of concern in their products based on hazard characteristics, and one adding that disclosure requirements in developing countries should be no different than in developed countries.

115. The resolution encouraged stakeholders to implement the activities added to the GPA at ICCM3 in regard to the EPI hazardous substances in electrical and

101 SACIM/ICCM.4/15 pp. 39-41
102 SACIM/ICCM.4/15 paragraph 69
103 SACIM/ICCM.4/15 p. 42
104 SACIM/ICCM.4/15 p.43
105 SACIM/ICCM.4/15 paragraph 111
electronic products. The resolution further invited UNIDO to develop and finalise the workplan 2016-2020 set out in the secretariat’s report ‘Emerging policy issue update on hazardous substances within the life cycle of electrical and electronic products’. The resolution also called for stakeholders to implement the workplan, in a particular the ILO in addressing worker safety. The resolution further encouraged stakeholders to promote advocacy, awareness, information, education and communication about hazardous chemicals in electronic and electrical products for vulnerable groups. It also called for original equipment manufacturers to implement product-take-back programmes as well as to collect and provide health and safety information to workers on chemicals they are handling or exposed to in electronic and electrical products manufacturing.

106 With regard to the EPI – nanotechnologies and manufactured nanomaterials – Resolution IV/2 emphasised the need to continue to facilitate the exchange of information, and for UNIDO and the OECD to continue to develop international guidance and training materials. The resolution invited all stakeholders to continue to raise awareness and enhance capacity paying particular attention to the situation and needs of developing countries and countries with economies in transition.

107 For the EPI – endocrine disrupting chemicals – the resolution invited UNEP and WHO to address needs identified by developing countries as part of the workplan set out in the progress report submitted to ICCM4. Specifically, to: provide up-to-date information; raise awareness; provide international support for activities to build capacity, in particular developing countries and countries with economies in transition. The resolution also welcomed the ‘State of the Science of Endocrine Disrupting Chemicals – 2012’ report by UNEP and WHO that identified concerns that exposure to EDC during early stages of life can result in adult-onset disease, concluding that an important focus of action should be on reducing exposure. However, this part of the resolution raised concerns for some stakeholders who wished it to be noted that the methodology and conclusions of the report remain contentious among certain scientific groups.

108 Resolution IV/2 introduced a new EPI - environmentally persistent pharmaceutical pollutants. The resolution invited the IOMC to lead and facilitate cooperation action and to develop a plan of work, and invited Governments and other stakeholders to generate and share information to fill identified knowledge gaps. It requested these stakeholders provide support – expertise and financial – on a voluntary basis.

109 Resolution IV/3 – Highly hazardous pesticides (HHP) – welcomed the FAO, UNEP and WHO strategy to address HHPs. This strategy drew on the experience of FAO, UNEP and WHO over 2009-2012 – developing HHPs Guidelines, work on identifying and phasing out HHPs in Botswana and Mozambique, developing a regional strategy of phasing out HHPs in the countries of the Southern African

106 SAICM/ICCM.4/INF18
107 SAICM/ICCM.4/15 pp. 44-45
108 SAICM/ICCM.4/15 p. 45
109 SAICM/ICCM.4/INF/20 Annex III
110 SAICM/ICCM.4/15 p. 46 and footnote 10
111 SAICM/ICCM.4/15 pp. 46-47
112 Although a proposed ‘Global Alliance on Highly Hazardous Pesticides’ gained broad support at OEWG2 (SAICM/OEWG.2/13 paragraphs 113-114), such an alliance was not included in Resolution IV/3.
Development Community (SADC) and the East African Community (EAC) and Pacific. The resolution encouraged stakeholders to implement the strategy with an emphasis on promoting agroecological-based alternatives and strengthening national regulatory capacity to conduct risk assessment and risk management.113

120. The strategy to address HHPs identified a number of gaps in addressing the sustainable management of HHPs. These were presented in alignment with the 11 basic elements of the OOG. They were:

- Some countries still lack an effective legal framework and institutional capacity to address pesticides through their life cycles;
- Limited enforcement mechanisms and capacity means that highly hazardous pesticides continue to be legally or illegally available, widely used and often inappropriately used;
- Incomplete implementation of international instruments relevant to highly hazardous pesticides, including the Rotterdam Convention, the International Code of Conduct on Pesticide Management of FAO and WHO and the environmentally sound management and disposal of pesticide wastes under the Basel Convention;
- Limited coordination mechanisms among relevant stakeholders and between the agriculture, health and environment sectors in many countries;
- Poor systems for collection and sharing of highly hazardous pesticide data among all relevant stakeholders as well as limited research on the impacts of highly hazardous pesticides and alternatives thereto;
- Inconsistent industry engagement in addressing risks from highly hazardous pesticides across their life cycles;
- Poorly addressed or neglected socioeconomic factors and development planning can encourage the use of highly hazardous pesticides, particularly if they are lower cost;
- Insufficient capacity for highly hazardous pesticide risk assessment and risk reduction in many developing countries;
- Absence of, or very limited, capacity to deal with poisoning and chemical accidents involving highly hazardous pesticides;
- Inadequate national monitoring and assessment of the impacts of highly hazardous pesticides on health and the environment, and lack of global data;
- Low awareness of environmentally sound and safer alternatives to highly hazardous pesticides, especially at the local level (e.g., in farms), where awareness of such alternatives may be absent.114

121. The guidelines for taking action to address these gaps included: identification of HHPs; conducting needs and risk assessments; establishing and implementing appropriate risk mitigation measures of a regulatory and administrative nature, ranging from prohibition to training in their proper use. The main focus for concerted

---

113 SAICM/ICCM.4/15 p. 47
114 SAICM/ICCM.4/8 paragraph 26
action centred on awareness-raising, facilitating identification of HHPs, capacity-
building in regulatory control and piloting and the mainstreaming of alternatives.115

122. Resolution IV/4 – the Strategic Approach and sound management of
chemicals and waste beyond 2020 – requested the secretariat to commission an
independent evaluation of the Strategic Approach in accordance with the terms of
reference set out in the Annex of the resolution.116

123. Resolution IV/5 – Activities of the secretariat and budget – approved the
indicative budget and work programme of the secretariat for the period 2016-2020.117

Outcomes: EPIs, QSP projects, monitoring progress

Emerging Policy Issues and Other Issues of Concern

124. The EPIs and other issues of concern are summarised in Table 4. Their
outcomes are discussed below. The EPI Environmentally Persistent Pharmaceutical
Pollutants and the issue of concern – Highly Hazardous Pesticides are not discussed in
this section as the resolutions were agreed at ICCM4 and the first progress and update
reports will be presented at ICCM5. However, HHPs are discussed in the section
‘Intermediate State II’.

Table 4: Chairs/ co-chairs of EPIs and other issues of concern

<table>
<thead>
<tr>
<th>Issue</th>
<th>Chair/ Co-Chair</th>
<th>Conference Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead in Paint</td>
<td>UNEP/ WHO</td>
<td>ICCM2, ICCM3 &amp; ICCM4</td>
</tr>
<tr>
<td>Chemicals in Products</td>
<td>UNEP</td>
<td>ICCM2, ICCM3 &amp; ICCM4</td>
</tr>
<tr>
<td>Hazardous substance within the life cycle of electrical and</td>
<td>UNIDO</td>
<td>ICCM2, ICCM3 &amp; ICCM4</td>
</tr>
<tr>
<td>electronic products (HSLEEP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nanotechnology and manufactured nanomaterials</td>
<td>UNITAR/ OECD</td>
<td>ICCM2, ICCM3 &amp; ICCM4</td>
</tr>
<tr>
<td>Endocrine-disrupting chemicals</td>
<td>OECD/ UNEP/ WHO</td>
<td>ICCM3 &amp; ICCM4</td>
</tr>
<tr>
<td>Environmentally persistent pharmaceutical pollutants</td>
<td>UNEP/ WHO</td>
<td>ICCM4</td>
</tr>
<tr>
<td>Perfluorinated chemicals and the transition to safer alternatives</td>
<td>OECD/ UNEP</td>
<td>ICCM2 &amp; ICCM3</td>
</tr>
<tr>
<td>Highly hazardous pesticides</td>
<td>FAO/ UNEP/ WHO</td>
<td>ICCM4</td>
</tr>
</tbody>
</table>

115 SAICM/ICCM.4/8 paragraphs 33-37
116 SAICM/ICCM.4/15 pp. 48-50
117 SAICM/ICCM.4/15 pp. 50-59
EPI – Lead in Paint

125. In the six years since ICCM2 (2009-2015) that lead in paint had been an emerging policy issue, the Global Alliance grew to a partnership of 38 – nine governments, three intergovernmental organizations and 26 non-governmental organizations. This fell short of the target (50 partners) set in the business plan. As of September 2018, the Alliance had grown to 92 partners.\(^\text{118}\) By June 2015, 57 Governments had put in place legally binding regulations relating to lead in paint, with another 14 declaring that they were in the process of putting such measures in place. Again, these figures fell short of the target (70 or more by 2015) set in the business plan. As of March 2019, the 2015 target had been reached; 72 countries were reported to have confirmed that they had enacted legally binding controls on lead in paint.\(^\text{119}\)

126. During the early years of the Alliance’s work, activities centred on information gathering and identifying gaps in knowledge. These activities included baseline surveys with SAICM national focal points and networks associated with UNEP and WHO, aimed at eliciting information about the use of lead paint and prevention and control actions.

127. Reported at ICCM3, the Alliance’s partners undertook paint sampling and testing in a number of countries including: Kazakhstan, Nigeria, Lebanon, Peru and the Russian Federation. IPEN – a partner of the Global Alliance – received funding from the European Union SWITCH-Asia Programme to conduct paint sampling in seven Asian countries – Bangladesh, India, Indonesia, Nepal, Philippines, Sri Lanka and Thailand.\(^\text{120}\) In 2013, and reported at ICCM4, partners of the Global Alliance – UNEP and IPEN – undertook sampling and testing of lead content in decorative paints in the market in nine developing countries and countries with economies in transition – Argentina, Azerbaijan, Chile, Cote D’Ivoire, Ethiopia, Ghana, Kyrgyzstan, Tunisia and Uruguay. Results from both these surveys indicated that paints tested contained high levels of lead, although lead free paint was available in these countries.\(^\text{121}\)

128. The Global Alliance launched international awareness campaigns in 2013, 2014 and 2015 providing multi-lingual materials in support of those campaigns, accessible from the Alliance’s website.\(^\text{122}\) The 2013 and 2014 campaigns resulted in at least 50 countries organizing activities.\(^\text{123}\) For the 2015 campaign, events took place in 87 cities in 39 countries. WHO and other Alliance partners continue to produce publications aimed at raising awareness and advocacy.\(^\text{124}\)

129. The Alliance was successful in securing funding from the governments of the United States, Germany, Norway and Sweden that were used to convene meetings and the operational costs of the Alliances start-up phase.\(^\text{125}\)

130. Future work of the Alliance will focus on increasing the number of (1) countries that had adopted legally binding laws and regulations, standards or

\(^{118}\)SAICM/OEWG.3/6, p.3
\(^{119}\)SAICM/ICCM.4/9 p. 4; SAICM/OEWG.3/9, paragraph 95, p. 16
\(^{120}\)SAICM/ICCM.3/14 p. 8
\(^{121}\)SAICM/ICCM.4/9 p. 4
\(^{122}\)www.who.int/ipcs/lead_campaign/en
\(^{123}\)SAICM/ICCM.4/9 p. 4
\(^{124}\)WHO/FWC/PHE/ILPPW 2015
\(^{125}\)SAICM/ICCM.3/14, paragraph 23
procedures to control the production, import and sale and use of lead paints, (2) companies that have eliminated the use of added lead compounds in paints that they produce, (3) countries with national awareness days for prevention of lead poisoning, (4) contributors/ partners participate in the work of the Alliance. One component of the US$ 8.19 million GEF project, reported at OEWG3, will be used to simulate national regulatory action, engage the private sector and provide information on best practice, resulting in 40 more countries legislating and implementing legislation on lead in paint.

126 One component of the US$ 8.19 million GEF project, reported at OEWG3, will be used to simulate national regulatory action, engage the private sector and provide information on best practice, resulting in 40 more countries legislating and implementing legislation on lead in paint.127

131. The on-line survey of SAICM stakeholders, for this evaluation, revealed that over half of respondents considered that they had had success in addressing this EPI in their activities. Representatives from the CEE Region were the most positive in their response with those from the Africa Region the least positive. However, as recently as October 2018, an article on the UNEP website highlighted that, despite legislation banning lead in paint, most countries still have lead in paint.128

EPI – Chemicals in Products

132. Immediately after ICCM2, where chemicals in products was identified as an EPI, an initial scoping exercise was conducted involving a survey sent to national focal points to assess their views on focus and priority product sectors. This initial work resulted in the selection of four product sectors for further study – children’s products/ toys, electronics, clothing and construction materials. The case studies that followed highlighted the interruption of information exchange in the production chain between chemical manufacturers providing information further down the production chain on the one hand, and the producers/ brand owners who attempt to pull down information on chemical content in materials and components from higher up the chain, on the other.

133. The key outcomes of the project reported at ICCM3 summarised the gaps, obstacles and commonalities identified in the four sectors. They were: the need for information on the part of product designers in making decisions, actors within the production chain concerning the chemicals they use, Governments and distributors in overseeing the safe composition/content of products, consumers in making informed purchases, recyclers in properly directing materials back into production processes and waste-handlers in following proper disposal practices.129

134. The proposal for a voluntary international programme for information on chemicals in products along their supply chain, called for in Resolution III/2, was developed and presented at ICCM4, together with a guidance document for stakeholders in exchanging chemicals in products information.130 In addition to this outcome, UNEP (the lead agency on this EPI) succeeded in engaging representatives from the four product sectors on the chemical in products policy issue.131

135. The proposed programme presented to ICCM4 had the following objectives:

126 SAICM/ICCM.4/INF/14, Table 1 p. 5
127 SAICM/OEWG.3/6 pp. 3-4
129 SAICM/ICCM.3/15 p. 4
130 SAICM/ICCM.4/10 and SAICM/ICCM.4/11
131 SAICM/ICCM.4/9 p. 5
• Within supply chains, to know and exchange information on chemicals in products, associated hazards and sound management practices;

• To disclose information of relevance to stakeholders outside the supply chain to enable informed decision-making and actions about chemicals in products; and,

• To ensure that, through due diligence, information is accurate, current and accessible.\textsuperscript{132}

136. The emphasis on voluntary sharing of information with Governments, in the proposed programme\textsuperscript{133} caused concerns for civil society stakeholders at ICCM4. According to the CiP Programme, governments are responsible for CBI [confidential business information] protection, but the Programme encourages only “voluntary sharing of relevant information with governments.” In other words, industry does not need to provide governments with full access to information on chemicals in products but requires CBI protection instead.\textsuperscript{134}

137. The on-line survey with SAICM stakeholders revealed that half of respondents considered that they had had at least some success in addressing this EPI in their activities. Developing country stakeholders highlighted the lack of capacity and resources to address this issue observing that most products are imported and authorities are not able to monitor for chemical composition.

\textit{EPI – Hazardous Substances within the Life Cycle of Electrical and Electronic Products}

138. The workshop called for in Resolution ll/4 had originally been scheduled for May 2010, but due to the lack of financial support it had to be postponed until March 2011. The workshop was convened by the secretariats of the Basel and Stockholm conventions and UNIDO (on behalf of IOMC). Funding from the ministries of environment of Japan, Sweden and the United States Environmental Protection Agency together with UNIDO enabled the workshop to finally take place. The workshop resulted in three sets of recommendations – upstream, midstream and downstream recommendations.

139. Upstream recommendations included: identification of chemicals of concern; best practice in information flows, elimination and reduction in hazardous chemicals and business procedures; policy instruments; identification of stakeholders that should engage in upstream issues.

140. Midstream recommendations included: environmental sound manufacturing and capacity-building; information on health and safety in manufacturing; health surveillance, disease prevention, exposure and monitoring.

141. Downstream recommendations included: integrating policies; legislation and enforcement of ILO conventions and MEAs; voluntary approaches and CSR; information and awareness-raising; international and regional cooperation.\textsuperscript{135}

\textsuperscript{132}SAICM.ICCM.4/10 p. 5  
\textsuperscript{133}SAICM/ICCM.4/10 p. 17  
\textsuperscript{135}SAICM/ICCM.3/16 pp. 2-4
142. During the period 2012 to 2015, progress on this EPI centred on downstream activities providing support to developing countries for the design of sustainable e-waste management schemes; development of private-public partnerships; establishment of an informal network for work on e-waste, including a pilot study looking at heavy metals in children living and studying near an e-waste site in Thailand; organization of side events by UN entities to highlight the importance of tackling HSLEEP; a survey of HSLEEP to map existing tools for management of HSLEEP; adoption of technical guidelines by the Basel Convention; development and endorsement by 200 public interest NGOs of “A challenge to the global electronics industry to adopt safer and more sustainable products and practices, and eliminate hazardous chemicals, exposures and discharges”.

143. At ICCM4, a representative speaking on behalf of African States called for action to minimise the use of hazardous materials in the production processes, i.e. calling for a shift in focus from downstream to upstream processes. This was of critical importance to Africa, due to the large inflow of e-waste to the continent and the crude recycling methods employed, which posed risks to human health and the environment.

144. The main gaps regarding the implementation of the GPA activities highlighted in the progress report presented to ICCM4 reiterated the Africa region’s concerns for a greater focus on the upstream level. More efforts were required to streamline discussions with manufacturers on the provision of information regarding the use of hazardous substances and ways to enhance green design. Other gaps identified included development and implementation of green purchasing standards at Government level as well as in the private sector. A proposed work plan for the period 2016-2020 was produced for ICCM4 (based on the 13 GPAs endorsed at ICCM3).

145. The on-line survey with SAICM stakeholders revealed that less than a third of respondents considered that they had had at least some success in addressing this EPI in their activities.

**EPI – Nanotechnologies and Manufactured Nanomaterials**

146. Over the course of 2009-2012, three areas of work were conducted under the Nanotechnology and manufactured nanomaterials EPI: UNITAR held a series of awareness-raising workshops in association with SAICM regional meetings; pilot activities with support from the Government of Switzerland, were undertaken in Uruguay, Nigeria and Thailand to explore the development of national nanotechnology-related policies; a report on nanotechnologies and manufactured nanomaterials, including issues of relevance to developing countries and countries with economies in transition, has been coordinated by the SAICM secretariat.

147. At ICCM3 several representatives expressed concern over the lack of available information on the benefits and risks posed by manufactured nanomaterials and the ethical and social issues they raised. They supported technical, institutional and legal information sharing, technology transfer and capacity-building activities,
especially in relation to health and environmental protection. The Conference endorsed the addition of 13 GPAs specific to this EPI.\textsuperscript{140}

148. Reporting on progress made on the 13 GPAs at ICCM4 (agreed at ICCM3), outcomes included: UNITAR, with funding from the Government of Switzerland, embarked on a second phase of pilot projects at the national level, in Armenia, Jordan and Viet Nam, building on the first pilot projects; UNITAR produced a guidance document and e-learning course ‘An introduction to nanomaterial safety’ that was delivered twice in 2014 and once in 2015; UNITAR and OECD hosted regional meetings on capacity-building on nanosafety in the LAC, AFR and AP regions. OECD continued to develop freely available on-line tools for assessing nanotechnologies and nanomaterials for regulatory purposes; WHO convened an expert meeting in 2015 to begin the preparation of a new WHO International Programme on Chemical Safety environmental health criteria document on principles and methods for assessing the risk of immunotoxicity associated with exposure to nanomaterials; the GHS Sub-Committee has begun a process for a review of applicability of GHS to nanomaterials.\textsuperscript{141}

149. Following on from the pilot project in Thailand, the Thai Government approved a National Nanotechnology Policy Framework and a five-year “National Nanosafety and Nanoethics Strategic Plan” to ensure sustainable development of nanotechnology.\textsuperscript{142}

150. The 2015 regional workshops on nanosafety highlighted significant gaps in addressing this EPI.\textsuperscript{143} The Africa regional workshop identified the following priority areas: the need for improvements in human resources and expertise, in policy and legal frameworks, and in nano-focused infrastructure. Participants proposed a number of actions to address these: develop and establish a regional network on nanosafety; carry out a survey of the current status of nanomaterials; develop national working groups and coordination mechanisms; implement and sustain awareness raising activities; develop legal frameworks; carry out capacity building exercises; develop guidelines for workplace safety; and monitor nanomaterials’ usage in industry.

151. The LAC regional workshop highlighted the need to: establish a network of experts and policy workers; build capacity in terms of infrastructure and human resources, and access to financial assistance; create national requirements for a registry of nanomaterials; implement product identification, regulation and standards’ setting; establish and promote an accreditation scheme for relevant centres and agencies; to enhance communications and share expertise (starting with occupational health guidelines); share good practice in occupational handling of nanomaterials; to develop procedures for impact reduction from the use of nanomaterials.

152. Other gaps in delivering on this EPI presented at ICCM4 included the need for a central hub to share and disseminate information. Whilst UNITAR and OECD endeavoured to use their websites, the lack of SAICM information clearing house was recognised. The need to increase work and engagement with industry in order to

\textsuperscript{140} SAICM//ICCM.3/24 paragraphs 124 & 129
\textsuperscript{141} SAICM/ICCM.4/9 paragraphs 40-49
\textsuperscript{142} SAICM//ICCM.4/INF/19, Section III
\textsuperscript{143} SAICM/ICCM.4/INF/19 pp. 7-8
enhance industry’s stewardship role and the provision of information on nano was also recognised.\textsuperscript{144}

153. The on-line survey with SAICM stakeholders revealed that about a third of respondents considered that they had had at least some success in addressing this EPI in their activities.

\textbf{EPI \textemdash Endocrine-Disrupting Chemicals}\textsuperscript{145}

154. The main progress made under this EPI from ICCM3 to ICCM4 was the publication of the UNEP/WHO report \textit{State of the Science of Endocrine Disrupting Chemicals \textemdash 2012}. This report was not without controversy; there is an on-going debate between stakeholders as to the testing regime that is most appropriate for EDCs. Those that advocate a (linear) dose-response function approach for each chemical in isolation, are at odds with those that advocate a non-linear approach to risk assessment that also addresses timing of exposure and the issue of synergistic effects of combinations of more than one EDC. Furthermore, these advocates also argue for risk assessment that distinguishes between the different effects for different ages – from fetuses, to children, to reproductive adults, to older people.\textsuperscript{146}

155. Regional workshops were held in the Africa, Asia-Pacific, Central and Eastern Europe, and the Latin America and Caribbean regions, where it became clear that most developing countries and countries with economies in transition have limited or no control over substances with endocrine-disrupting potential. The need for increased awareness on the issue was widely recognised, including the need for gathering information on levels of endocrine-disrupting chemicals in the environment.

156. In response to the challenges facing developing countries UNEP established an Advisory Group on environmental exposure and impact. UNEP also began to develop an EDC project aimed at improving intergovernmental and intersectoral coordination as well as raising awareness about EDCs. In 2015 the project proposal was being finalised.

157. OECD has developed and updated existing Test Guidelines for both hazards to the aquatic environment and to human health. WHO has established a global network of chemical risk assessment institutions (Chemical Risk Assessment Network) in order to provide a forum for scientific exchange and collaborative actions, including on endocrine-disrupting chemicals.

158. Post ICCM4, the following actions were planned: WHO preparation of articles for the academic literature and continuation of the Chemical Risk Assessment Network; OECD to continue development of Test Guidelines; UNEP to compile and develop overview reports to be disseminated on UNEP website. All three institutions plan to facilitate international meetings to address EDC issue.

159. The on-line survey with SAICM stakeholders revealed that just under half of respondents considered that they had had at least some success in addressing this EPI in their activities.

\textsuperscript{144} SAICM/ICCM.4/INF/19 p. 8
\textsuperscript{145} SAICM/ICCM.4/INF/20
**Issue of concern – Perfluorinated Chemicals**

160. During the period 2009-2012, the following activities under the ‘Perfluorinated chemicals and the transition to safer alternatives’ issue were conducted:

- Establishment of a web-based portal on perfluorinated chemicals (www.oecd.org/ehs/pfc);
- Release of a 2009 OECD survey on perfluorinated chemicals;
- Web-based seminars;
- Workshop on perfluorinated chemicals held on 5 September 2011, immediately preceding the third Strategic Approach regional meeting for Asia and the Pacific;
- Establishment of a global perfluorinated chemicals group that developed a draft programme of work.\(^\text{147}\)

161. Resolution III/3 at ICCM3 noted that a significant need remained for additional work to support the implementation of resolution II/5, and invited the Global PFC Group to broaden participation in the work on perfluorinated chemicals beyond the member countries of the Organization for Economic Cooperation and Development (OECD) as an important mechanism for achieving further progress in this area and to report on progress to the Conference at its fourth session.\(^\text{148}\) Consequently, the PFC Group agreed to postpone the development of a survey on PFCs production, use and release until enhanced participation by non-OECD countries was in place.\(^\text{149}\)

162. Over the period 2012-2015, the activities carried out under this issue were:

- Production of two reports: a *Synthesis paper on per- and polyfluorinated chemicals (PFCs)*; A report on risk reduction approaches for per- and polyfluoroalkyl substances (PFASs);
- Implementation of a revised structure to the web portal; and
- Efforts made to engage a wider group of stakeholders to participate in the work of the Global PFC Group.

163. The proposed work plan (2016-2020), resources permitting, focused on the need to gather scientific data and enhance understanding on the alternatives that are available and to widen the debate regarding the replacement of certain fluorinated compounds, where possible, by non-fluorinated alternatives and different technologies.\(^\text{150}\)

164. The on-line survey with SAICM stakeholders revealed that just under two fifths of respondents considered that they were very successful or had had some success in addressing this issue. Much of this success was attributed to the regulatory regimes in WEOG countries. Within developing countries, stakeholders lacked the resources and capacity to monitor this group of chemicals. IOMC POs - OECD and UNEP – have made progress in raising awareness of these compounds but the actual

\(^{147}\) SAICM//ICCM.3/13, paragraph 23  
\(^{148}\) SAICM/ICCM.3/24, p.40  
\(^{149}\) SAICM/ICCM.4/9 paragraph 66  
\(^{150}\) SAICM/ICCM.4/INF/21 paragraph 22
transition to safer alternatives is very slow. Transitioning to safer alternatives will not take place in the short term.

**Quick Start Programme projects**

165. The QSP project portfolio comprised 184 approved projects. Since its establishment there have been 14 application rounds.\(^{151}\) A total of 70 projects (out of the 184) had been completed by June 2015. A further 45 projects had completed their activities and were in the process of submitting and revising their final reports at that time. Most of the 115 projects that had completed all their activities, were aimed at:\(^{152}\)

(a) Developing national chemicals profiles;
(b) Developing national capacity assessments;
(c) Setting priorities for activities for the implementation of the Strategic Approach;
(d) Developing risk assessment methodologies;
(e) Mainstreaming issues pertaining to the sound management of chemicals into the national development plans of the participating countries;
(f) Improving cohesion and implementation of existing international agreements;
(g) Developing national awareness-raising campaigns on sound chemicals management;
(h) Developing SAICM implementation plans; and,
(i) Building capacity on non-chemicals alternatives.

166. Table 5 provides details on the number of QSP projects with activities completed within each region and their executing agencies.

---


\(^{152}\) SAICM/EB.10/4 p. 4
Table 5 Completed Projects by Region and IOMC Executing Agency (June 2015)^153 154

<table>
<thead>
<tr>
<th></th>
<th>Africa</th>
<th>Asia Pacific</th>
<th>Central &amp; Eastern Europe</th>
<th>Latin America &amp; Caribbean</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITAR</td>
<td>24</td>
<td>10</td>
<td>4</td>
<td>8</td>
<td>46</td>
</tr>
<tr>
<td>UNDP/UNEP</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>UNIDO</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>WHO</td>
<td>2</td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNEP/WHO</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>UNEP</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>UNDP</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Basel Convention Secretariat/ Regional Centre</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>PAHO/WHO</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No IOMC/ BRS executing agency^155</td>
<td>8</td>
<td>9</td>
<td>5</td>
<td>7</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>27</td>
<td>11</td>
<td>27</td>
<td>111</td>
</tr>
</tbody>
</table>

167. 101 (of the 115 projects) were channeled through Government ministries/departments, with the remaining 14 projects channeled through non-governmental organizations.

168. A comprehensive evaluation of the QSP outcomes was conducted in 2015. This evaluation reached a number of conclusions:^156

- A key success of the QSP was the creation of enabling environments for the sound management of chemicals at the national level. All three of the Strategic Priorities identified in Resolution 1/4 (see paragraph 63 above) were addressed.
- In many cases the QSP projects succeeded in ‘mainstreaming chemicals management’ into national legislation, policies and institutions. However, not all countries were able to succeed in this due to a range of factors including the lack of priority of chemical management in national agendas, a lack of technical capacity as well as the lack of capacity for inter-departmental collaboration and coordination required for effective chemicals management.

^153 Data compiled from SAICM/EB.10/4 Table A.1 and Table A.2
^154 Four projects not accounted for in Table 5 were multiregional projects.
^155 These figures included one project in AFR region with PAN as executing agency; two in AP region with SAEDA and the Blacksmith Institute as executing agencies; two in the LAC region with CEHI and SPREP as executing agencies.
^156 SAICM/ICCM.4/INF5 pp. 8-9
• A large number of publications were produced through the QSP projects. However, these documents and data were not readily available in part because, at the SAICM secretariat level, there was no centralised system of content management and retrieval, which would have allowed for outputs to be made accessible to a wide audience.

• Major gains were documented in political and technical service-level awareness and understanding of the risks of chemicals, the importance of SMC, and the tools available to manage risks; and in stakeholder coordination with enhanced coordination and active participation by diverse stakeholders. However, quantitative data on the health and environmental impacts of chemicals remained scarce and systems for regularly collecting and updating such information were largely absent.

• Gender was addressed in a minority of QSP projects. Those projects that adequately assessed gender tended to be those that were channelled through non-governmental organizations.

• Relatively few civil society projects were funded but their impact was high. Partnerships between NGOs and government were found to be very effective in ensuring good outcomes as well as the sustainability of projects.

• Many projects developed externally-funded projects which effectively continued QSP projects (e.g. with funds from the GEF, UN agencies, NGOs and donors); however, few countries were able to follow up with resources allocated from national budgets; and even fewer were able to give examples of economic instruments to promote industry participation in financing for chemical management.

• For many governments, chemicals were still not a priority issue, and there was a lack of evidence of internalisation and delivery of chemicals management into national plans and budgets. Chemical management initiatives relied on external sources of funding; and on individual commitment. Even where chemical management was reflected in Government mandates and policies, an ‘implementation gap’ still existed.

**Monitoring progress including Global Plan of Action, Indicators of Progress and the Overall Orientation and Guidance (OOG)**

169. The Global Plan of Action was a comprehensive document, agreed at ICCM1, which lists 273 activities aimed at addressing all five Overarching Policy Objectives. Each had its own target/timeline, together with its indicator of progress.\(^{157}\)

170. IPEN has been the most prominent stakeholder in reporting regularly on the progress of its members in contributing to the delivery of GPA activities, providing regular monitoring reports at ICCM2, ICCM3 and ICCM4.\(^ {158}\)

171. An assessment of progress made by IOMC organizations in contributing to the delivery of the activities within the GPA was produced by IOMC in June 2014, providing reflections on progress made for each activity over the period 2006-2014.\(^ {159}\)

---


172. In regard to Governments reporting on progress made in delivering on the GPAs there was no systematic reporting to ICCM. However, governments were invited to participate in the systematic collection of data relating to the 20 indicators of progress designed to monitor the progress in implementing SAICM.

173. A baseline report covering the period 2006-2008, and two progress reports (2009-2010; 2011-2013) have been produced, reviewing countries’ performance in making progress towards the five overarching policy objectives, as reflected by the 20 indicators (see Table 2 above).¹⁶⁰

174. Whilst the baseline data collected in 2006-2008 was voluminous, it did not lend itself to translation of the data into a form that could be used to populate the 20 indicators. Consequently, the data collection exercise did not allow for the development of a comprehensive baseline for all 20 indicators. In the end, baseline estimates were only possible for seven of the indicators, as a result of issues described in this section.¹⁶¹

175. An online questionnaire was developed to generate relevant data for the first progress report. This questionnaire was also used to collect data for the second progress report, resulting in comparable data to assess progress made for each of the 20 indicators over the two reporting periods (2009-2010 and 2011-2013).

176. The response rate for government representatives was 40% in the first round of data collection¹⁶², and for the second round a similar response rate of 43% (that included all stakeholders).¹⁶³

177. The common approach to data collection across the two reporting periods had the potential to allow for a comparative analysis to be conducted. However, a number of weaknesses in the data collection limited that potential. Firstly, the relatively low response rate highlighted in the previous paragraph. Secondly, and more significantly, the regional variations in response rates, particularly for the second reporting period (2011-2013); an Africa region response rate of 19% (10 out of 54, including three partially completed submissions), in contrast to the WEOG region with a 97% response rate (28 out of 29, including one partially completed submission).¹⁶⁴ Thirdly, the lack of consistency in country submissions between the two reporting periods – those countries reporting in period 2 were not necessarily the same countries that had reported in reporting period 1. Of the 83 governments that made submissions for reporting period 2, only 47 of these had made a submission for period 1 (out of a total of 78 submissions made in reporting period 1).¹⁶⁵ These limitations call into question the effectiveness of the reporting mechanisms.

¹⁶⁰ See SAICM/ICCM.3/INF/5 for the baseline report; SAICM/ICCM.3/INF/6 for the first progress report; SAICM/OEWG.2/INF/4 for the second baseline report. An on-line survey was open from June to December 2017 to seek feedback on progress for the period 2014-2016.
¹⁶¹ SAICM/ICCM.3/INF/5, paragraphs 107-109
¹⁶² SAICM/ICCM.3/INF/6, paragraph 22
¹⁶³ SAICM/OEWG.2/INF/4, paragraph 103
¹⁶⁴ SAICM/OEWG.2/INF/4, Table 1, p. 8 and paragraph 11
¹⁶⁵ Contrast SAICM/OEWG.2/INF/4 paragraphs 10 and 11 with SAICM/ICCM.3/INF/6 paragraph 25, p. 10
178. The second progress report and summary report presented to ICCM4 provided reflections on the efficacy of the 20 indicators:166

**Methodological:** Firstly, it was not certain whether respondents were reporting on activities that had taken place in the relevant reporting period. This uncertainty was particularly acute for those governments that did not report in both reporting periods. Secondly, there were challenges in integrating the contributions of non-government stakeholders due to stakeholders’ own surveys and reports that were not fully reflected in the online submissions. Thirdly, the activity-based indicators and questions asked are open to variability in responses depending upon who is completing the questionnaire and their interpretation of the questions and their level of knowledge.

**Scope:** Firstly, activities on compliance and enforcement of policy are not explicitly addressed in the indicators. For example, indicators 19 and 20 address illegal international traffic of chemicals and waste but do not address illegal international trade, such as through informal markets, which may pose significant challenges to meeting the 2020 goal. Secondly, the extent of national funding for chemicals management through government budgets and ODA is not included in Indicator 18. Thirdly, Indicator 1 focuses on alternative chemicals to support risk reduction, with no monitoring of policy or implementation relating to non-chemical alternatives and agroecological approaches.

**Results-based indicators:** The 20 indicators are outputs based and, whilst being a necessary condition for meeting the 2020 goal, may not be sufficient. There is a need for outcome and impact focused indicators to complement the existing indicators of progress, i.e. results-based indicators that measure tangible reductions in health and environmental impacts of chemicals use. The probable inclusion of chemicals management targets within many of the SDGs will also require more quantitative results-based evidence.

179. Notwithstanding the limitations of the indicators of progress as an effective monitoring system to track performance of SAICM over time, 59% of respondents (of the online survey) considered that the indicators of progress had been very effective (8%) or had had some effect (51%) in assessing progress towards the sound management of chemicals and waste. Disaggregating the data by stakeholder group revealed that ‘IOMC POs’ and ‘industry’ were less optimistic than government and civil society stakeholders with 46% of industry respondents considering that the indicators had had ‘little effect’ in monitoring progress towards the 2020 goal. For IOMC POs the figures were 30% ‘little effect’ and 20% ‘ineffective’.

180. Reasons for stakeholder skepticism included the subjective nature of self-reporting, under-reporting, the lack of a results-based framework and the lack of applicability to non-government stakeholders. Respondents also cautioned that further application of the indicators to the emerging policy issues could cause further challenges.

181. At ICCM4 a further framework for implementing the Strategic Approach was introduced and agreed – the Overall Orientation and Guidance or OOG (see paragraphs 105-107, above).

---

166 SAICM/OEWG.2/INF/4, paragraphs 114-119 and SAICM/ICCM.4/3 paragraphs 26-30
182. With the introduction of the 11 basic elements towards the sound management of chemicals and waste in the OOG, it was agreed to consider the 20 indicators of progress in line with the eleven basic elements. Whilst this alignment fits up to a point, the challenge of integrating the basic elements with the existing 20 indicators of progress has been acknowledged:

While there is some coherence in this relationship, stakeholders may wish to further examine the indicators with a view to improving their coverage of the basic elements for future reporting.\(^{167}\)

183. The indicators and milestones listed for each activity within the GPA offer the potential for monitoring progress in delivery of these activities and with it progress towards achieving the five objectives of the OPS, which the activities within the GPA are aligned.

Drivers

184. The drivers highlighted in Figure 3, were those factors that influenced the degree to which the outcomes were realised as a result of the output delivery of SAICM. These drivers were within the purview of SAICM stakeholders. Each are discussed below.

Capacity of Secretariat to fulfill functions

185. Over the ten year period 2006-2015, the secretariat was hampered by capacity constraints to deliver on its mandated functions. These functions were defined in paragraph 28 of the OPS and the secretariat original project document (see paragraphs 20-22, above). There were two inter-related capacity constraints: resources and staff.

186. An indicative budget was approved at each conference to cover the costs of the staff of the secretariat and expenses incurred by the secretariat in order to fulfil its functions. These expenses covered items such as: conference and inter-sessional meeting costs; staff travel; office running costs.\(^{168}\) However, over the period 2006-2015, there was an annual shortfall in the amount of funds donated (voluntarily) such that the agreed budget was never achieved, ranging from a 4% shortfall in 2013 to a 56% shortfall in 2009. The annual shortfall was at least 43% for six of the ten years (2006-2015).\(^{169}\)

187. Related to the shortfall in funds available to the secretariat was the understaffing of the secretariat over the 10 year period. The project experienced a chronic shortfall in professional staff capacity throughout the period 2006-2015; the full complement of professional staff (five full time equivalent- FTE) for the period 2006-2009 was only achieved for the last 10 months of 2009; for 2010-2012 (seven FTE staff) the actual staff complement was 2.6 FTE; for the period 2013-2015 the funds available to the secretariat was the understaffing of the secretariat over the 10 year period. The project experienced a chronic shortfall in professional staff capacity throughout the period 2006-2015; the full complement of professional staff (five full time equivalent- FTE) for the period 2006-2009 was only achieved for the last 10 months of 2009; for 2010-2012 (seven FTE staff) the actual staff complement was 2.6 FTE; for the period 2013-2015 the

---

\(^{167}\) SAICM (2015) Summary report on progress in the implementation of the Strategic Approach for the period 2011–2013. SAICM/ICCM.4/3 p.15

\(^{168}\) See SAICM/ICCM.1/7 Table 2, p.98; SAICM/ICCM.2/15, Table 1, p.46; SAICM/ICCM.3/24 Table 2, p. 43.

\(^{169}\) See Evaluation of the UNEP project Strategic Approach to International Chemicals Management Secretariat SAICM (2019) Table 5, p.23
complement was 3.86 FTE.\(^{170}\) The project addressed this shortfall to some extent through the contracting of short-term consultants.\(^{171}\)

188. Despite the shortfall in funding and subsequent staffing capacity issues, the functions of the secretariat were extended at ICCM2 and ICCM3. At ICCM2, the servicing of the Open-ended Working Group and the administration of ‘emerging policy issues’ were added to the secretariat’s responsibilities.\(^{172,173}\) At ICCM3 Conference mandated the secretariat to develop ‘overall orientation and guidance’ to achieve the SAICM 2020 goal.\(^{174}\)

189. The shortfalls in staff and resources affected the secretariat’s ability to deliver on number of functions. The most significant of which were the operation of the QSP and the information clearing house function.

190. There were significant gaps in the filling of the QSP Programme Officer post within the secretariat over the 2006-2015 period, and the additional staff post to support the QSP Programme Officer, recommended and endorsed by Conference at ICCM2, from 2010 onwards, was not in post until February 2015.\(^{175}\)

191. By August 2015, some 64 QSP projects were running on average two years late. Eighteen projects were three or more years late. Of the 64 projects running late, most had completed their activities but had failed to submit final narrative reports, M&E reports and/or financial reports.\(^{176}\)

192. The delays in completion of the QSP projects were partly attributed to the staff capacity issues within the secretariat. However, other institutional factors also contributed to the delays in QSP project completion. These were: structure of QSP trust fund supervision and management; mechanisms for disbursing funds to projects; delays in drawing up the legal agreements for projects.\(^{177}\)

193. The secretariat was unable to realise its full potential for sharing the knowledge generated from the QSP project portfolio between developing countries because of the under-funding of the Secretariat in general, and the inability to establish an effective forum for such knowledge exchange (the information clearinghouse).

194. The consequences of the lack of a centralised SAICM information clearinghouse also affected the outcomes of the EPIs. These depended on a functioning clearing house mechanism to collate and disseminate knowledge and information. In the event, many of the IOMC chairs and co-chairs facilitated this knowledge exchange through their own websites.

195. Despite the challenges that faced the secretariat, the evaluation of its performance concluded that the secretariat was effective in providing support to the

---

\(^{170}\) Source: SAICM/ICCM.2/9* paragraph 8; SAICM/ICCM.3/21/Rev.1, Table 1; SAICM/ICCM.4/14, Table 2.

\(^{171}\) See Evaluation of the UNEP project Strategic Approach to International Chemicals Management Secretariat SAICM (2019) paragraphs 25-26

\(^{172}\) Resolution II/6

\(^{173}\) Resolution II/4 of ICCM2

\(^{174}\) SAICM/ICCM.3/24; paragraph 27, p. 58

\(^{175}\) SAICM/ICCM.4/14, Table 2

\(^{176}\) SAICM/EB.10/4 Annex 1

\(^{177}\) Evaluation of the UNEP project Strategic Approach to International Chemicals Management Secretariat SAICM (2019) paragraphs 79-84
ICCM and its subsidiary bodies. The role of the Secretariat in organising these meetings, preparing documents, being responsible for the logistics and sharing outputs with participants post-conference, was central to their success. The Secretariat was effective in ensuring that all outcomes and recommendations from ICCM were communicated to SAICM stakeholders as well as uploading all documents related to ICCM onto the SAICM website.178

Information sharing and collaboration

196. Success in realizing SAICM outcomes was highly dependent on SAICM stakeholders sharing information and collaborating with each other. The Dubai Declaration emphasized active engagement in partnerships between Governments, the private sector and civil society, as well as stressing the responsibility of industry to make available data and information on health and environmental effects of chemicals.179

197. There has been much collaboration between SAICM stakeholders. The IOMC organisations have led on the emerging policy issues: UNEP/WHO for lead in paint; UNEP for chemicals in products; UNIDO for hazardous substances in the lifecycle of electronics; UNITAR/OECD for nanotechnologies; OECD/UNEP/WHO for EDCs; OECD/UNEP for Perfluorinated chemicals and the transition to safer alternatives (see Table 4, above).

198. In addition, IOMC organisations were also executing agencies for 76 of the QSP projects with the BRS secretariat or regional centers executing agency for six QSP projects (see Table 5, above). Their support to the recipient organisations included technical support and training. The IOMC have also produced a wide range of training and technical manuals, freely available on IOMC member websites.180

199. The governing bodies of several IOMC organisations have passed resolutions in support of SAICM, thereby providing the political will within those organisations to take the SAICM agenda forward. For example, the World Health Assembly Resolution 69.4 (2016) ‘The role of the health sector in the Strategic Approach to International Chemicals Management towards the 2020 goal and beyond’, requested the preparation of a roadmap to enhance health sector engagement in SAICM. The roadmap, approved by the Seventieth WHA in 2017, recognized the need for cooperation and collaboration between stakeholders for its success, and called on Member States to define and implement plans for delivering on the actions.181

200. Nevertheless, at ICCM4, the degree of concern over the lack of commitment at the highest levels of some UN agencies, led delegates to pass Resolution IV/1 in 2015 that called on those (organisations of the UN Management Group) that had not done so to declare their commitment to SAICM (see paragraph 110, above).

201. The WHO was envisaged to take a co-lead role with UNEP in the SAICM secretariat.182 Over the period 2007 to 30 September 2012, WHO seconded a staff

---

178 Evaluation of the UNEP project Strategic Approach to International Chemicals Management Secretariat SAICM (2019) Executive Summary, paragraphs 1 & 4
179 Dubai Declaration, paragraphs 19 and 20.
180 See IOMC (2014) IOMC Analysis of Work Done to Implement the SAICM Global Plan of Action.
181 See https://apps.who.int/iris/bitstream/handle/10665/273137/WHO-FWC-PHE-EPE-17.03-eng.pdf?ua=1
182 See Overarching Policy Strategy, paragraph 29
member to the secretariat. WHO withdrew this support owing to financial constraints.\(^{183}\)

202. Developing formal structures for collaboration with the BRS has progressed since ICCM3. At ICCM3, delegates “…expressed support for the 2011 synergies decision on enhancing cooperation and coordination between the BRS conventions, which would assist in making progress towards achieving the 2020 goal,” and called for SAICM efforts to be integrated into the regional centres of the Basel and Stockholm conventions, and assigned a mandate to carry out SAICM activities.\(^{184}\)

203. In 2013, the conference of the parties to the BRS conventions requested the BRS secretariat to enhance cooperation and coordination with SAICM. Consequently, in early 2014, a taskforce assessed possible areas of cooperation and collaboration with the UNEP Chemicals Branch and the SAICM secretariat.

204. At ICCM4, the BRS secretariat provided an update of its involvement with SAICM over the period 2013-2015. This included: providing input into EPI discussions, participating in meetings provision of information, hosting an event on EDCs; providing inputs into development of the OOG; making efforts to ensure SAICM was integrated into the post-2015 development agenda. The BRS secretariat also reported that other operational or administrative areas of cooperation were being explored post ICCM4\(^{185}\).

205. At ICCM2, the IFCS, the International Union of Pure and Applied Chemistry and the Society of Environmental Toxicology and Chemistry offered to become scientific advisory bodies to SAICM as well as offering to host annual meetings leading up to ICCM3. However, these offers were declined (see paragraphs 62, 78 and 79, above).

206. It was envisaged that the SAICM secretariat would play an instrumental role in facilitating information sharing between SAICM stakeholders – through the provision of information clearinghouse services, the promotion of the exchange of relevant scientific and technical information.\(^{186}\) The absence of the information clearinghouse has been recognized as a factor limiting information sharing among SAICM stakeholders (see paragraph 152, above).

207. Maintaining the balance between the confidentiality of business information and industry provision of information on chemicals was a challenge for SAICM stakeholders. Paragraph 22 of the Dubai Declaration declared that “In making information available, information on chemicals relating to the health and safety of humans and the environment should not be regarded as confidential”\(^{187}\). Nevertheless, a number of SAICM stakeholders flagged this issue. The lack of information sharing by business was of concern in relation to the Chemicals in products EPI (see paragraph 136, above), the Hazardous substances within the life cycle of electrical and electronic products EPI (see paragraph, 144 above), Nanotechnologies and manufactured nanomaterials EPI (see paragraphs 147 and 152, above).

\(^{183}\) SAICM/ICCM.3/24 paragraphs 186-188
\(^{184}\) SAICM/ICCM.3/24 paragraph 50.
\(^{185}\) SAICM/ICCM.4/INF/24 paragraphs 5 to 18
\(^{186}\) Overarching Policy Strategy, paragraphs 28f, 28h, 28i
\(^{187}\) See Dubai Declaration on International Chemicals Management, paragraph 22
Secure, sustainable and adequate financing

208. The success of the SAICM mission depended on secure and sustainable financing. With the notable exception of the QSP trust fund, the SAICM process has been hampered by both uncertainty and shortfalls in planned financing.

209. Whilst, donors contributed US$ 41 million over the period 2006-2015 to the QSP Trust Fund, with four donors (EU, Sweden, Norway and the USA) contributing 73% of the funds,\(^{188}\) funding for the SAICM secretariat was less forthcoming. For six of the 10 year period the annual budget shortfall was at least 43% (see paragraph 186, above).

210. In addition, to the donor contributions for the QSP and for the functions of the secretariat, delegates at ICCM2, reported that they had spent US$ 698,693 over the period 2006-2009.\(^{189}\) This finance was used to cover expenses ‘associated with the current session of the Conference, the meeting of the Open-ended Legal and Technical Working Group held in Rome from 21 to 24 October 2008, regional meetings and publication of the Strategic Approach texts’.\(^{190}\) (No such financial contributions were reported for the period 2010-2015.)

211. SAICM stakeholders (see Figure 1) also contributed resources – financial and in-kind – to support the SAICM agenda. IOMC organisations chaired or co-chaired EPIs and other issues of concern; SAICM stakeholders provided funding for EPI activities including lead in paint (see paragraph 129), hazardous substances within the lifecycle of electrical and electronic products (see paragraph 138, above), nanotechnologies and manufactured nanomaterials (see paragraph 146, above).

212. The issue of secure, sustainable and adequate financing for SAICM has been a recurring theme over the period 2006-2015. At ICCM1 no agreement was reached about how to make provision for adequate and sustainable funding (see paragraphs 54 to 58, above). At ICCM2, Resolution II/3 invited stakeholders to provide funds (see paragraph 67, above), and to report to secretariat in preparation for a review of financial arrangements to be presented at ICCM3 (see paragraph 69, above). There were differing views to the proposal presented at ICCM3, Resolution III/1, relating to the mainstreaming and industry involvement components of the integrated approach. There was a common concern raised on the challenges in raising funds for a voluntary approach as compared with legally binding instruments (see paragraphs 89 to 95, above). At ICCM4, there was acknowledgement that the scale of resources available was insufficient to achieve the 2020 goal (see paragraph 108, above). The invitation to the GEF in resolution IV/2 to provide financial support for implementation of ICCM resolutions on all emerging policy issues resulted in the GEF approval of an US$ 8.19 million project “Global best practices on emerging chemical policy issues of concern under the Strategic Approach to International Chemicals Management” in 2018.\(^{191}\)

\(^{188}\) Evaluation of the UNEP project Strategic Approach to International Chemicals Management Secretariat SAICM (2019) Table 7

\(^{189}\) Evaluation of the UNEP project Strategic Approach to International Chemicals Management Secretariat SAICM (2019), paragraph 38

\(^{190}\) SAICM/ICCM.2/9*, paragraph 11

\(^{191}\) SAICM/OEWG.3/6, p.3
Intermediate State 1: Strengthened capacity, commitment, technical knowledge, political will to implement and mainstream SAICM

Africa Region

213. This section is drawn from the responses of the Government NFPs of 18 countries in the region. They were:

| Burkina Faso | Ghana | Niger |
| Comoros      | Lesotho | Nigeria |
| Cote D’Ivoire | Madagascar | Senegal |
| The Republic of Congo | Malawi | Sierra Leone |
| Egypt        | Mali     | South Africa |
| Gambia       | Mauritania | Tanzania |

Coordination within Government and stakeholder engagement and collaboration

214. Many NFP respondents reported that their country had national coordination committees, often through the ministry of environment, established specifically to address SAICM. Some of these committees comprised government ministries, multi-sectoral in nature including a range of sectors, for example: health, agriculture, industry, transport, trade, fisheries, agriculture, customs and energy.

215. Other examples of national coordination committees, as well as comprising government agencies, also included stakeholders such as regional and local municipalities and authorities, civil society and non-governmental organisations, universities, private business and labour unions.

216. Countries that had established national coordination committees included: Burkina Faso, Egypt, Gambia, Cote D’Ivoire, Lesotho, Niger, Nigeria, Sierra Leone, South Africa and Tanzania.

217. These committees have brought together agencies, hitherto fragmented, sometimes working at cross-purposes and to their own agendas, into a common platform for cooperation and collaboration. This has resulted in strengthened capacity of national actors and the creation of regulatory frameworks dedicated to chemicals and waste management.

218. Examples of the results of the increased coordination and collaboration resulting from SAICM included: in Egypt, establishing information exchange networks focused on capacity building for chemicals management through the preparation of guidelines for proper handling of hazardous chemicals, and facilitating the exchange of information through a central information system; in Cote d’Ivoire, creating a database on chemicals and their effects on health and environment; in Nigeria, raising awareness and promoting stakeholder ownership, thereby mobilizing support and catalysing partnerships for chemicals management; in Malawi, government departments seeking guidance on appropriate disposal methods for waste, such as the Ministry of Health seeking guidance on appropriate disposal methods for expired drugs and medical supplies.
Strategic Plan to Address Chemicals and Waste

219. Of the 18 NFPs (from the Africa Region) who provided information, two responded that the process of developing a strategic plan for chemicals and waste management was yet to start; six responded that the development was in its early stages; four considered that the development of the plan was well underway with broad engagement of stakeholders, with a further four indicating that the strategic plan had been completed and approved by government. The remaining two respondents reported that their governments were in the implementation phase of the plan (see Figure 4).

Figure 4: Status of Strategic Plan for SAICM in Africa Region

220. In Burkina Faso, the SAICM national implementation strategy with associated action plan was developed and approved through a forum that brought together around 70 participants from ministries, international organisations, embassies, the private sector, civil society, NGOs and union associations.

221. In Comoros, the National Implementation Plan focused on three priority areas: strengthening the regulatory and institutional framework; strengthening the technical and scientific capacities of the structures responsible for the chemicals management; raising awareness of all stakeholders involved in the chemicals management.

222. In Cote D’Ivoire the adoption of SAICM has resulted in raised awareness of the actors in the public and private sectors that in turn has generated a climate of trust, thereby encouraging decision-makers to integrate chemicals and waste management into national policies on health and environment protection. Through the Ministry of Environment the government has created two national programmes – one on chemicals management, the other on waste management – together with associated action plans.

223. In Guyana, policies to prevent and address stockpiles of obsolete pesticides through a polluter pays approach are being considered; a public-private partnership
has been established to monitor restricted use pesticides and to encourage sound chemical storage facilities.

224. In Madagascar a SAICM action plan was developed by the ministries of industry, agriculture, health, customs, labour and environment, with the focal points for the Minamata Convention and the BRS conventions. Fifty activities were identified in the action plan, aligned to the activities in the GPA. Progress has been made on two of these: Activity #163: Conduct awareness raising and prevention campaigns to promote chemicals without risk in the regions of Madagascar; Activity #199: Establish mechanisms to implement and monitor importation of chemicals.

225. Niger has developed a strategy and action plan on chemicals management as well as communications and chemical governance strategies.

226. Nigeria has developed a SAICM national implementation plan for the sound management of chemicals and waste that addresses national priority areas. This plan was developed and validated in close consultation with stakeholders.

227. In Senegal, a roadmap has been developed to address the risks associated with poorly controlled chemicals management. The country has also developed a national action plan for the reduction of chemical, biological, radiological and nuclear risks and threats, of which a significant component addressed waste and hazardous chemicals management.

228. In Sierra Leone a chemical and waste national strategic plan was developed as part of the Environment Protection Agency five year strategy. The national strategic plan was informed by the SAICM objectives and the GPA.

229. In South Africa, the Multi-Stakeholder Chemicals Committee has a work plan that is updated annually and monitored every quarter. Academics and NGO representatives attend the quarterly monitoring meetings.

230. In Tanzania, the strategic plan for chemicals management (2017-2022) is implemented through the Government Chemist Laboratory Authority. The annual budget to implement this plan is approved by parliament.

Regional cooperation on chemicals and waste management

231. Several NFPs from West Africa highlighted the role of the Economic Community of West African States (ECOWAS) in facilitating regional cooperation on chemicals and waste management. This regional body has been proactive, hosting a technical meeting of experts to validate the regional strategy and action plan for integrating chemicals and hazardous waste management. The environmental policy of this regional cooperation aims to combat pollution and control the movement of dangerous goods, as well as to promote information, education and communication for effective and ecologically sound chemicals management. It was reported that the influence of SAICM has been to put chemicals and waste management high on the political agenda.

232. It was reported that the SAICM regional meetings (see Figure 2) provided good opportunities for countries to share experiences and learn from each other. These meetings also enabled participants to develop common positions on chemicals

---

192 This meeting took place October/ November 2017.
and waste issues within the region, and address these issues in a more coordinated and coherent manner. For some NFPs, the regional meetings have increased their capacity to raise and discuss chemicals issues at the national level.

233. It was reported that countries benefit from the regional centers of the BRS conventions that facilitate the implementation of SAICM and provide a platform for sharing experiences.

234. The QSP funded several regional projects over the 10 year period building capacity and facilitating regional networking.193 These projects included: Supporting the updating national chemicals management profiles in Burkina Faso, Djibouti, Madagascar, Rwanda and Sao Tome & Principe, Côte d'Ivoire, Haiti and The Republic of Congo, facilitated by UNITAR; Implementation of the Libreville Declaration on Health and Environment in Africa in Kenya and Gabon, facilitated by UNEP and WHO; Chemical Accident Prevention Programmes in Mali and Senegal; Strengthening the capacities of civil society organizations and communities to monitor the pesticides health impacts in Mali and Senegal, facilitated by Pesticide Action Network (PAN) Africa; Institutional capacity building for implementing of the Stockholm Convention on POPs in Burundi and Rwanda.

**Asia Pacific Region**

235. This section is drawn from the responses of the Government NFPs of eight countries in the region. They were:

<table>
<thead>
<tr>
<th>Country</th>
<th>Country</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>Iraq</td>
<td>Tuvalu</td>
</tr>
<tr>
<td>India</td>
<td>Lao PDR</td>
<td>Yemen</td>
</tr>
<tr>
<td>Iran</td>
<td>Maldives</td>
<td></td>
</tr>
</tbody>
</table>

**Coordination within Government and stakeholder engagement and collaboration**

236. As was the case in the Africa region, Government NFPs of the Asia Pacific region reported that committees have been established to coordinate and lead on the SAICM agenda at the national level.

237. The Islamic Republic of Iran has established a national coordination mechanism within each related ministry and agency tasked with specific areas of work and activities aligned to the GPA. The Department of Environment is the competent national authority for the BRS conventions, with the Ministry of Foreign Affairs the national focal point for SAICM and the chemical conventions. These two agencies have joint responsibility for managing coordination between different stakeholders on issues related to chemicals and waste management.

238. In Iraq, the Supreme Committee for the implementation of chemicals policies has been established.

239. In the Maldives, it was reported that the establishment of the Chemicals Management Coordination Committee and the development of a chemicals profile has resulted in improved coordination among agencies.

---

193 SAICM/EB.10/4, Tables A, pp. 5-20
240. In India, the Ministry of Environment, Forest and Climate Change, coordinated and engaged with all relevant stakeholders (including government, civil society, academia and industry) when formulating legislation for the sound management of chemicals and waste.

**Strategic Plan to Address Chemicals and Waste**

241. Of the six NFPs (from the Asia-Pacific Region) who provided information, three responded that the process of developing a strategic plan for chemicals and waste management was yet to start; two considered that the development of the plan was well underway with broad engagement of stakeholders. One respondent reported that their government was in the implementation phase of the plan.

242. The Government of India has several rules relating to chemicals and waste, including: Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016; Regulation on Lead contents in Household and Decorative Paints Rules, 2016; Regulation of Polychlorinated Biphenyls Order, 2016; Solid Waste Management Rules, 2016; E-Waste Management Rules, 2016; Plastic Waste Management Rules, 2016. In addition, the Government has identified specific targets with respect to chemical and waste management aligned to the SDGs, specifically SDG 3, 6, 12 and 14.

243. In the Islamic Republic of Iran, the Ministry of Health, Treatment and Medical Education, the lead ministry developing the national chemical profile has concentrated its activities on enhancing risk assessment capacity, implementing GHS and safe disposal of waste and obsolete chemicals. The Ministry of Industry, Mines and Trade is assigned to develop available knowledge and information for the industry sector regarding the SAICM related activities. The National Customs Organization has been entrusted the responsibility of regulating and preventing illegal trafficking of toxic chemicals. The Department of Environment is responsible for air, water and soil pollution monitoring in the context of chemical environment agreements. The Department of Environment has promoted and strengthened chemical legislation, laws and regulations and access to chemical inventory records within government plans.

244. In Iraq the following activities were reported: preparation of the chemical security strategy; preparation of the National Register of Chemicals; formation of a committee of synergies between chemical conventions; data collection and preparation of hazardous waste databases.

245. In the Maldives, a National SAICM Implementation Plan (2016-2020) has been developed. Funding has been secured to develop and disseminate guidelines for safe handling and disposal of chemicals. There has been a Minamata Initial Assessment, as well as activities to facilitate early action on the implementation of the Stockholm Convention on POPs.

**Regional cooperation on chemicals and waste management**

246. The regional SAICM meetings together with regional meetings of the BRS conventions promoted knowledge exchange between countries that helped to guide formulation of national legislation. Strengthening regional cooperation in this region will enhance the management of chemicals and waste.
The QSP funded several regional projects over the 10 year period building capacity and facilitating regional networking. These projects included: Protecting human health and the environment from mercury in artisanal and small scale gold mining in Cambodia and the Philippines, facilitated by UNEP; Poisons information network for the Pacific in Cook Islands, Kiribati, Samoa, Solomon Islands and Tonga, facilitated by WHO; Capacity Strengthening and Information Exchange on PCBs Management in Cambodia, China, Lao PDR, Pakistan, and Sri Lanka, facilitated by BCRC China; Capacity Building and Institutional Strengthening of Pacific Islands’ Management and Disposal of E-Waste in Cook Islands, Kiribati and Samoa, facilitated by Secretariat of the Pacific Regional Environment Programme (SPREP); Technical Support to Strengthening National Capacities for Sound Management of Priority Industrial Carcinogens in Indonesia and Thailand, facilitated by WHO.

Central and Eastern Europe Region

This section is drawn from the responses of the Government NFPs of six countries in the region. They were:

Republic of Belarus Montenegro Russia
Republic of North Macedonia Poland Serbia

Coordination within Government and stakeholder engagement and collaboration

The NFPs of two countries in this region – Republic of Belarus and Serbia – provided information for this section. In the case of Republic of Belarus, the management of chemicals was delivered through the creation of interdepartmental working groups and interdepartmental coordination councils. For example, implementation of the provisions of the technical regulations on the safety of chemical products required the involvement of many government bodies, committees and organizations. For example, the Commission for Emergency Situations was under the Council of Ministers, the Council for Pesticides and Fertilizers under the Ministry of Agriculture and Food, the Coordinating Council for the Implementation of the Stockholm Convention on Persistent Organic Pollutants under the Ministry of Natural Resources and Environmental Protection. An interdepartmental coordinating council is responsible for work under the Basel, Rotterdam, Stockholm and Minamata Conventions.

Serbia benefitted from a QSP project ‘Capacity Building and Strategic Partnerships for Chemicals Safety in the Republic of Serbia’ which aimed at strengthening capacities and collaboration of competent authorities in charge of chemicals management, human health and consumer protection.

The final draft of the National Implementation Plan (NIP) for the Stockholm Convention, the establishment of the Coordinating Body for the management of POPs was planned, with responsibility for monitoring the implementation of the NIP. This body will be made up of representatives from state institutions, industry associations, the scientific and research sector, and non-governmental organizations. It is

---

194 SAICM/EB.10/4, Tables A and B, pp. 5-20
anticipated that this coordinating mechanism will facilitate the collection and exchange of information reported to the Secretariat of the BRS conventions and the European Environment Agency, thereby strengthening integrated chemicals and waste management in the country.

**Strategic Plan to Address Chemicals and Waste**

252. Of the six NFPs (from the CEE Region) who provided information, two responded that the development was in its early stages; four considered that the development of the plan was well underway with broad engagement of stakeholders.

253. In Republic of Belarus, the plans for addressing chemicals and waste include: the Action Plan for technical regulation ‘On the Safety of Chemical Products’; the National Environmental Protection Plan designed to monitor the quality and safety of food products; NIP for the Stockholm Convention; National Action Plan for Environmental Health. Under the State programme ‘Environmental protection and sustainable use of natural resources for 2016-2020’, approval was given for implementation of activities for safe handling of POPs – handling of unsuitable pesticides, handling of equipment and monitoring impacts of exposure to POPs.

254. In Macedonia, over the period 2008-2010, a National Action Plan and Roadmap for Mainstreaming Actions for the Sound Management of Chemicals was developed under the guidance of the SAICM NFP in coordination with the SAICM Secretariat.

255. Montenegro adopted the Chemicals Management Strategy (2015-2018) aimed at identifying activities to address chemicals management within the context of the existing legal and institutional framework and administrative capacity. An action plan comprising 37 activities was developed.

**Regional cooperation on chemicals and waste management**

256. Regional activities included projects aimed at developing national systems of chemicals management in order to facilitate economic integration with the EU.

257. The QSP funded several regional projects over the 10 year period building capacity and facilitating regional networking. These projects included: Supporting the updating national chemicals management profiles in Armenia, Georgia and Serbia, facilitated by UNITAR; Enhancing Capacity Building for the Development of the National Registers of Pollutant Release and Transfer, in Republic of Belarus and Tajikistan.

---

195 SAICM/EB.10/4, Tables A and B, pp. 5-20
Latin America and the Caribbean Region (LAC)

258. This section is drawn from the responses of the Government NFPs of 13 countries in the region. They were:

- Argentina
- Colombia
- Costa Rica
- Dominica
- Ecuador
- Guyana
- Mexico
- Panama
- Paraguay
- Peru
- St Kitts and Nevis
- Trinidad and Tobago
- Uruguay

Coordination within Government and stakeholder engagement and collaboration

259. The Government NFPs from this region provided many examples of national coordinating bodies established to lead on the management of chemicals and wastes.

260. In Costa Rica, the Secretary for Chemicals Substances Management was established, comprising representatives from Government, the public sector, the private sector and academia. The structure of the Secretariat followed the integrated approach of SAICM, based on realizing the synergies that come from a whole systems approach. Through this structure support is provided to the focal points of the chemical conventions.

261. In Guyana, an inter-ministerial, inter-agency stakeholder network was established in 2010. This network comprised stakeholders that included: government agencies (including agriculture and mining), pesticides and chemicals importers, distributors, manufacturers, vendors, chemicals users – pest control operators, farmers and farm workers – education and research institutions, civil society and NGOs.

262. In Mexico, the National Advisory Committee for the Integrated Management of Chemical Substances, Persistent Organic Pollutants and Hazardous Waste subject to International Agreements, in Environmental Matters (CCNSG) is the advisory body to the Secretariat of Environmental and Natural Resources. The CCNSG comprises experts from agencies of the Federal Public Administration, academic institutions, social and business organisations. Its purpose is to provide information, recommendations and facilitate inter-sectoral coordination in chemicals and waste management. It was reported that the CCNSQ strengthens the coordination and communication on chemical substances, generating a democratic space for citizen participation.

263. In Peru, SAICM resulted in the strengthening of the Technical Group on Chemical Substances comprising representatives from public organisations, civil society and academia. SAICM elevated the chemicals agenda as well as generating greater interest in chemicals and waste management issues at the subnational level.

264. Trinidad and Tobago benefited from a QSP project that involved examining coordination within government aimed at strengthening the legislative, regulatory and institutional gaps and needs for Trinidad and Tobago in relation to the Basel, Rotterdam and Stockholm Conventions. The Pesticides and Toxic Chemicals Control Board, advises the Minister of Health on regulations relating to pesticides and toxic chemicals.
In Uruguay, the Technical Advisory Committee for the Protection of the Environment was established as a space for participation and coordination among ministries, the office of Planning and Budget, Congress of Mayors, academia, business chambers and workers, and environmental NGOs.

**Strategic Plan to Address Chemicals and Waste**

Of the 12 NFPs (from the LAC Region) who provided information, three responded that the process of developing a strategic plan for chemicals and waste management was yet to start; three responded that the development was in its early stages; one considered that the development of the plan was well underway with broad engagement of stakeholders, with a further four indicating that the strategic plan had been completed (with two yet to be approved). One respondent reported that their government was in the implementation phase of the plan (see Figure 5).

**Figure 5: Status of Strategic Plan for SAICM in LAC Region**

- ☒ Have not yet started
- 👎 Development in early stages
- ⌛: Development of plan well underway
- ≡ Strategic plan completed
- ☑ We are in implementation phase of the plan

Argentina has established the Directorate of Chemical Substances and Products whose function is to coordinate with Government ministries and agencies to develop the national strategy for the integrated management of chemicals, supporting each authority to strengthen its compliance within its competencies.

In Costa Rica, action plans for chemicals and waste management are aligned with the principles of SAICM and the chemicals conventions. The political will and commitment for chemicals and waste management was reflected in the decree on chemical safety.

In Dominica, a National Chemical Management Programme has been developed and the situational analysis component of the plan was underway in 2018.

In Ecuador, the national plan for implementation of SAICM was developed in 2011. Current work (2018) focuses on developing strategic plans related to the international chemicals conventions.
In Mexico an initial review of the 273 activities within the GPA was carried out to assist in setting of national priorities in chemicals and waste management.

*Regional cooperation on chemicals and waste management*

The establishment of the regional chemicals and waste network of the intergovernmental forum of ministers of environment has strengthened the exchange of information and cooperation between countries. The creation and implementation of a regional plan by this forum will contribute to the management of chemicals and waste in the region.

Support from the Basel Convention Regional Centers has enabled countries in the region to: advance activities for the early implementation of the Minamata Convention; to implement projects for the best practices for the management of PCBs in the mining sector; build capacity for managing POPs.

The regional institution – Mercado Común del Sur (MERCOSUR) – composed of Argentina, Brazil, Paraguay and Uruguay, has developed an action plan aligned to the GPA that included the following priority areas: mercury, GHS, pesticides and contaminated sites.

The QSP funded several regional projects over the 10 year period building capacity and facilitating regional networking. These projects included: Supporting the updating national chemicals management profiles in Chile and Costa Rica, facilitated by UNITAR; Integrated regional campaign on minimization of mercury domestic sources with actions of intervention to protect women and children in Argentina, Bolivia, Chile, Paraguay, Peru and Uruguay, facilitated by the Argentine Society of Doctors for the Environment; Enabling workers and workplaces for SAICM implementation in Brazil, Chile and Uruguay, facilitated by Sustainlabour; Promoting sound chemical management through strengthening workers capacities in Dominican Republic, El Salvador and Nicaragua, facilitated by Sustainlabour.

*Western Europe and Others Group*

This section is drawn from the responses of the Government NFPs of eight countries in the region. They were:

<table>
<thead>
<tr>
<th>Austria</th>
<th>Germany</th>
<th>Switzerland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Monaco</td>
<td>United States of America</td>
</tr>
<tr>
<td>Denmark</td>
<td>Sweden</td>
<td></td>
</tr>
</tbody>
</table>

In Canada, SAICM and the 2020 goal has provided additional political impetus to Canada’s domestic chemicals management programme as well as funding renewal requests over the 10 year period.

---

196 SAICM/EB.10/4, Tables A and B, pp. 5-20
278. For the EU, the REACH Regulation of 2006 states that: This Regulation should contribute to fulfillment of the Strategic Approach to International Chemical Management (SAICM) adopted on 6 February 2006 in Dubai.\textsuperscript{197}

279. The EU and its Member States were reported to have a number of legal instruments in place that enhanced the responsibility and involvement of stakeholders. It was reported that the EU and its Member States fully implement the MEAs through respective EU legislation and have a number of legal instruments in place that aim at ensuring the sound management of chemicals and waste across sectors. It was further reported that the EU chemicals and waste regulations were directly applicable in the Member States. National legislation in the Member States complemented the European instruments.

280. The EU Action Plan for a Circular Economy (2015) sought to implement the full life-cycle approach to chemicals management, with the objective of achieving non-toxic material cycles.

281. The 7th Environmental Action Programme for the European Union (2013) included a number of actions on chemicals, including the development of a non-toxic environment strategy by 2018 (postponed until 2019). It is expected that the strategy will address: (1) the safety of manufactured nanomaterials and materials with similar properties; (2) the minimisation of exposure to endocrine disruptors; (3) appropriate regulatory approaches to address synergistic effects of chemicals and (4) the minimisation of exposure to chemicals in products.

282. The EU established two bodies involved in chemicals management, the European Chemicals Agency and the European Food Safety Authority. It was reported that the main task of both is to carry out the risk and/or hazard assessment for the chemicals covered by their mandate and to publish all results of their scientific work on their websites.

**Driver: Role of National Focal Points\textsuperscript{198}\textsuperscript{}**

283. At the national level, the Overarching Policy Strategy called for Governments to designate a national focal point to facilitate communication nationally and internationally, and for national focal points to be representatives of inter-ministerial or inter-institutional arrangements. In the event over 80% of national focal points were based in the Ministry of Environment.

284. The role of the government NFP is central to the delivery of the 2020 goal. Paragraph 23 of the Overarching Policy Strategy states that “…each government should designate a Strategic Approach national focal point to act as an effective conduit for communicating on Strategic Approach matters…” \textsuperscript{199} No detailed description of the functions of the NFP role were agreed. At ICCM2, the Africa Region NFPs proposed guidelines for NFPs although they were never formally agreed (see paragraph 86 above).

\textsuperscript{197} REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 20006, paragraph 6

\textsuperscript{198} This section is drawn from findings from focus group discussions with NFPs at IP1 in Brasilia February 207 and interviews April-June 2018

\textsuperscript{199} SAICM (2006) Strategic Approach to International Chemicals Management: SAICM texts and resolutions of the International Conference on Chemicals Management. UNEP, WHO, pp 24-25
285. NFPs from Africa, Asia-Pacific, Central and Eastern Europe and Latin America and Caribbean regions identified their role as one of raising awareness and promoting the introduction of ideas generated at the international SAICM forum into national policies, legislation and regulations. They saw their role as one of coordinating and promoting the integration of chemicals and waste management among ministries and building capacity, sharing information and being champions for change.  

286. In order to fulfill this role national focal points were required to play the role of facilitators, enablers, motivators and advocates, bringing together all stakeholders through the creation of collaborative mechanisms, encouraging buy-in and mobilizing resources, both domestically and from international funding bodies, and translating the international SAICM mandate at the national level.

287. National focal points were expected to support the preparation of national strategic plans for taking forward SAICM in their countries, aligned to the SDGs, WHO Roadmap and BRS and Minamata conventions. These plans included: actions for further chemical legislation; mainstreaming chemicals and waste management into development plans and national strategic plans; strengthening capacity of stakeholders.

288. The production of such plans required extensive networking with stakeholders at the national and local levels. A wide range of stakeholders were part of the network – government, civil society, business and industry, labour, health and agriculture sectors. For some NFPs this involved engaging with local communities and indigenous people.

289. National focal points had a role in promoting synergies between the BRS and Minamata Conventions and SAICM and working with other national focal points from the region to develop regional agendas for chemicals and waste management. Some SAICM NFPs also had the role of NFP for the BRS and Minamata conventions.

290. National Focal Points supported Regional Focal Points to integrate the sustainable management of chemicals and waste within programmes at regional and sub-regional levels.

291. The role of the NFP was to mediate between the different national sector actors and SAICM for the exchange of information, and between the different NFPs of the region to coordinate projects and joint initiatives to be implemented by the competent national authorities.

Factors influencing NFP role

292. The most significant factor that influenced the ability of NFPs to fulfill their role was the institutional arrangements in which they worked. Most NFPs were located within the Ministry of Environment (see paragraph 22 above) and found it a challenge to generate the synergies and collaboration between the ministries needed for SAICM. This was in part because their agency lacked power and influence to shape national agendas.

---

200 For three countries, the role of the NFP as described was shared among different national contact points responsible for implementation of international conventions and agreements on chemicals and waste management.
Further, the functions of Government were organised along sectoral lines. SAICM is inherently multi-sectoral. Many NFPs highlighted the inadequate institutional coordination and inter-agency cooperation as a major factor influencing their ability to deliver on their role.

For many, SAICM objectives were not high on national political agendas. This low priority was reflected within the NFP agencies – some NFPs had relatively junior positions, had multiple responsibilities, and consequently had insufficient time to devote to the SAICM agenda. Moreover, where the NFP occupied a senior position within the ministry, a similar challenge was reported – not enough time to allocate to SAICM role. For some, their role as NFP for SAICM was ‘invisible’ within their agency. The low political priority accorded to SAICM objectives was further reflected in the low budget, or no budget, allocated to SAICM related activities.

The degree of capacity influencing the NFP role was a broader issue than that of time allocated to multiple responsibilities. Capacity constraints included the lack of experienced personnel to conduct surveys (e.g. of contaminated sites), to assess health impacts as a result of exposure, monitoring and testing, as well as a lack of, and poor coordination between, accredited laboratories. Insufficient administrative capacity and numbers of qualified staff compounded by high staff turnover added to the challenges faced by NFPs in fulfilling their role.

Several NFPs reported that the short-term nature of chemicals management affected their ability to perform their role. Specifically, the capacity constraints, limited resources and political context led to agencies structured to address short-term problems, critical incidents and emergencies. This resulted in limited scope for planning and development for the long-term that would ensure safe and rational use of the entire spectrum of chemicals throughout their lifecycle.

Reflecting the sectoral structure, existing national chemical regulations were reported dispersed among numerous agencies – hard therefore to build an integrated regulatory framework. Weak legislation, the lack of technology and the technical capacity to maintain control on existing regulations, resulted in low levels of enforcement, thereby undermining NFPs’ role.

The relationship between the private sector and the regulatory authorities that govern chemicals and waste have a significant influence on NFPs fulfilling their role. The type of regulation, the level of enforcement and the nature of sanctions for the breach of regulations all have a bearing on the ability of NFPs to deliver on their mandate.

Some NFPs reported difficulties in engaging with the private sector, a reluctance to share information and data, including health related data on exposure of employees to chemicals.

The low level of awareness within Government and among end-users of chemicals posed serious risks to public health and the environment. The degree of commitment and political will to protect vulnerable groups, particularly women and children, from the health impacts of chemicals and waste impacted on NFPs’ ability to deliver on their mandate. Concern was raised as to the extent of these health impacts and the lack of engagement with vulnerable groups. This limited engagement created uncertainty on the magnitude of impacts and therefore the appropriate actions required.
301. The capacity of workers and farmers, unions, civil society organisations and NGOs, and the degree of freedom they had to engage with the chemical and waste agenda also impacted on the ability of NFPs to deliver on their role.

302. The degree of coordination and collaboration with SAICM stakeholders (listed in Figure 2) influenced the success of the NFP role. Turnover of NFPs highlighted the need for effective orientation programmes for newly appointed NFPs. Greater support and communication between NFPs, SAICM regional focal points, BRS focal points, IOMC organisations and the SAICM Secretariat, were seen as ways to enhance the NFP role.

Intermediate State II: Overarching Policy Strategy Objectives

Risk reduction

303. The findings of the survey conducted with SAICM stakeholders for this report found that over 70% of stakeholders considered SAICM as successful in achieving this objective.

304. Survey respondents from WEOG countries cited much progress in risk reduction strategies (e.g. EU REACH and Canada’s Chemicals Management Plan). Complex regulatory frameworks have evolved in these countries such that all aspects of chemicals management were covered, from their use in production of goods, exposure levels, and disposal. EU stakeholders pointed to European legislation as the cause of risk reduction and the influence that SAICM had had as a driver of REACH regulations (see paragraph 368, above). For some CEE respondents, the main driver for reducing risk arose from the requirements to meet the obligations of EU regulations and their obligations under the BRS conventions.

305. Just under 20% of survey respondents indicated that little or no success had been achieved in addressing the risk reduction objective. The factors accounting for this included: the lack of effective management systems, including institutional structures, for chemicals at the national level and gaps in legislation; poor collaboration between different agencies with responsibility for chemical safety; insufficient training and capacity building of end-users of chemicals.

306. The survey conducted by the secretariat designed to assess progress made against the 20 Indicators of Progress listed in Table 2, above (over the period 2011-2013), revealed that over 50% of all respondents were utilising IOMC tools and guidance in their management of chemicals and waste. In particular the FAO Pesticides Code of Conduct, WHO Drinking Water Quality Guidelines and WHO Classification of Pesticides. The survey found that there was a marked increase in the use of the OECD’s e-ChemPortal and OECD Test Guidelines over the period 2011-2013 in the LAC region. In the 2013 round 40% of respondents reported utilising UNITAR’s National (chemical) Profile guidance. These findings were supported by IOMC in its assessment of progress made in the provision of information on chemicals and harmonized risk assessment methodologies, citing significant work via

201 https://www.echemportal.org/echemportal/index.action
202 SAICM/OEWG.2/INF/4 pp. 17-18
the eChemPortal and OECD’s Risk Assessment Toolkit.\textsuperscript{203}

307. Despite the progress reported above, the Africa Region, at its fifth regional meeting, identified the lack of guidelines and methodologies to undertake assessment as a gap limiting the sustainable management of chemicals in the region.\textsuperscript{204} Similarly, the LAC Regional Coordinating Committee reported limited progress in risk assessment and management at the LAC region’s fifth regional meeting in 2013, citing a lack of understanding of risk assessment methodologies, applications and evaluations.\textsuperscript{205}

308. The SAICM secretariat survey revealed a high rate of risk management activity related to pesticides reported by respondents.\textsuperscript{206} Nevertheless, IOMC reported that a high proportion of pesticides used have high acute toxicity, have known chronic toxic effects even at very low exposure levels, or are very persistent in the environment or in organisms. Furthermore, there are pesticides that can cause severe or irreversible harm because of the conditions in which they were used because risk reduction measures – such as the use of personal protective equipment or maintenance and calibration of pesticide application equipment - are not easily implemented or are not effective.\textsuperscript{207} The IOMC report concluded that: “In most developing country situations HHPs cannot be used without risk due to local conditions of use and unavailability of appropriate protective and application equipment, or lack of information/access to alternatives”.\textsuperscript{208}

309. A recent survey (2015-2017) by PAN Asia-Pacific identified 14 pesticides (classified as HHPs by PAN) that were used by farmers in the region.\textsuperscript{209} Of these 14 pesticides, one – ethoprop – was classified by WHO as extremely hazardous (Class Ia), 10 as moderately hazardous (Class II) and four as slightly hazardous (Class III).\textsuperscript{210}

310. The same PAN Asia-Pacific survey found that hazardous conditions of use of these pesticides in Bangladesh, Indonesia, Malaysia, Vietnam, Philippines and India were similar. For example, pesticide packets and containers were stored in the house; empty pesticide packets were found in cooking areas; women sprayed chemicals without protective personal equipment; herbicide containers were used for water collection; communities were exposed to aerial spraying; pesticides were purchased in unmarked plastic bags.\textsuperscript{211} These practices put children at particular risk; a study in Thailand found that 94% of children in an agricultural community had metabolites of

\textsuperscript{203} SAICM/OEWG.2/INF/7, p. 3
\textsuperscript{204} SAICM/RM/Afr.5/7, p.14
\textsuperscript{205} SAICM/RM/LAC.4/12, p. 5
\textsuperscript{206} SAICM/OEWG.2/INF/4 p. 21
\textsuperscript{207} SAICM/ICCM.4/INF/7 p. 24
\textsuperscript{208} SAICM/ICCM.4/INF/7 p. 4
\textsuperscript{211} PANAP 2018. Corporate Accountability For Pesticide Use in the Asia Pacific Region. A Summary. Available at: http://files.panap.net/resources/Corporate-Accountability-For-Pesticides-Use-Summary.pdf
organophosphate insecticides in their urine.\textsuperscript{212}

311. Two recent academic studies (2016, 2017) found similar practices in the Africa region highlighting that very few pesticide containers are actually returned to suppliers; most were either dumped on farms, thrown on garbage sites, or re-used for domestic purposes (e.g. storage of food and kerosene).\textsuperscript{213}

312. In the Africa region, it has been estimated that the costs of injury to pesticide users in 37 sub-Saharan countries (conservatively defined as lost work days, outpatient medical treatment and inpatient hospitalisation) was USD 4.4 billion in 2005, exceeding the total annual overseas development aid given to the region for basic health services, excluding HIV/AIDS in 2013. A conservative estimate (assuming 2013 (inadequate) capacity levels) puts the predicted cost at USD 97 billion by 2020 – a twenty-twofold increase.\textsuperscript{214}

313. The Africa region reported the creation of a regional association of pesticide regulators that provides a forum for discussing new developments, challenges and lessons learnt. The SADC and SAHEL groups of African countries had established a harmonised pesticide registration system. However, these were not consistently implemented or operational.\textsuperscript{215}

314. CropLife International, in a paper presented to the OEWG2, asserted its promotion of strict adherence to safe handling instructions with all crop production products including HHPs, as well as its commitment to providing training on risk and use assessment best practices in developing countries.\textsuperscript{216} CropLife International reported its training of 120 field officers on good agricultural practices in Honduras in 2013, and its two year partnership (2013-2015) with the World Cocoa Foundation to train professional Spray Service Providers in Ivory Coast, Ghana, Nigeria and Cameroon.\textsuperscript{217}

315. Three recent cases highlight the continuing risk management issues and contested nature of pesticide use in the WEOG region. Whilst courts have awarded damages for exposure to glyphosate based herbicides,\textsuperscript{218} the scientific evidence is ambiguous. Literature reviews in 2013 and 2016 found no evidence of a causal link between glyphosate exposure and Non-Hodgkin lymphoma, whereas a 2019 analysis


\textsuperscript{214} SAICM/IxCCM.4/INF/1, paragraph 4

\textsuperscript{215} SAICM/RM/Afr.5/7, p. 12

\textsuperscript{216} SAICM/OEWG.2/INF/21, pp. 3-4

\textsuperscript{217} SAICM/IxCCM.5/Bureau.1/3, pp. 3-4

of epidemiological studies suggested a compelling link between exposure and increased risk.\textsuperscript{219}

316. Exposure to chemicals in the workplace was found to be widespread. The report of the Special Rapporteur on Human Rights to the Human Rights Council 39\textsuperscript{th} Session in September 2018 highlighted an array of challenges to the rights of workers affected by toxic exposures. These included\textsuperscript{220}:

- Inadequate standards of protection with risk assessments often based on incomplete knowledge resulting in misplaced assurances of worker safety, with processes for improving standards of protection being delayed;
- Decline in funding for institutions responsible for monitoring working conditions and exposure levels. Most States, especially those with a large informal sector, have poor and underreported levels of recording and notification of occupational accidents and disease;
- Specific vulnerability of low income workers, female workers, child workers, migrant and temporary workers, workers with disabilities and older workers. Low income workers are found in occupations with low economic security that expose them to toxic chemicals, limit their access to information and ability to defend their rights. Relatively high numbers of female workers are found in manufacturing, agriculture, services and the informal sector. Research has highlighted gender specific impacts: association between breast cancer and pesticides, industrial chemicals and metals; increased risk of miscarriages in the manufacture of electronics. An estimated 73 million children work in mines, agriculture and factories, exposed to pesticides, mercury and other toxic substances. In electronics children mine cobalt for batteries production and are exposed to toxic substances in the electronic waste sector. Migrant workers lack training, experience language barriers, face discrimination and restrictions on changing employers. Many migrants work in jobs that are characterised by dirty, dangerous and demeaning work. Undocumented migrants are especially vulnerable to these issues.
- Delays in protecting workers from exposure. Evidence that some business enterprises make efforts to delay the introduction of occupational health and safety legislation through campaigns aimed at undermining science and exploiting the financial insecurity of workers through threatened job losses.
- Opaque supply chains and transfer of hazardous work. The transfer of toxic work to lower income countries continues to be an issue, leaving vulnerable communities at risk.

317. The accessibility of poison centres for those exposed to toxic chemicals is an important component of strategies for realizing the Overarching Policy Objectives, including that of risk reduction. An assessment of the degree to which poison centres are accessible within countries and regions is discussed below in ‘Capacity building and Technical Cooperation’.

318. IOMC organisations have produced a series of guidance documents to support Governments in managing the risk of chemical accidents. OECD has produced:

‘Guiding Principles for Chemical Accident Prevention, Preparedness and Response’; Guidance on Developing Safety Performance Indicators; Guidance for senior leaders in high hazard industries. UNEP has produced guidance on Flexible Framework for Addressing Chemicals Accident Prevention and Preparedness. WHO has produced manuals for the public health prevention and management of chemical emergencies, as well as International Health Regulations (IHR) that address chemical events. However, the IOMC reported that no systematic evaluation of the gaps in capacities for prevention, preparedness and response has taken place in many countries, citing a lack of inter-sectoral coordination and communication and a lack of capacities for chemical event surveillance and response.221

319. The Africa Region reported that although countries had established national frameworks on prevention and response to chemical emergencies and ECOWAS had established draft guidelines for handling industrial accidents, very few countries had mechanisms in place to deal with industrial accidents and transport incidences involving chemicals. The report also noted the lack of industry engagement in preventing, preparing and responding to chemical accidents and emergencies. The report called for the development of integrated national and regional systems to prevent major industrial accidents and for emergency preparedness and response systems, and the need to link these efforts to the work of the Special Rapporteur on Human Rights.222

Knowledge and information

320. SAICM stakeholders who took part in the on-line survey considered that the Strategic Approach has had the most success in delivering on the Knowledge and Information sharing objective, largely as a result of the efforts of the Strategic Approach secretariat in disseminating information on chemicals through publications in multiple languages, its website, the regional meetings, ICCM, support and guidance to country focal points, and the Quick Start Programme (QSP). The QSP was attributed by many across the stakeholder groups to have enabled multi-sectoral exchange of information through the establishment of inter-ministerial and inter-agency coordination committees.

321. However, while there has been success at the global, regional and national levels in sharing knowledge and information, gaps in achieving this objective remain. While stakeholders recognized the progress made in disseminating information at the national level, within some countries information and knowledge flows between national and local levels remained weak.

322. For WEOG stakeholders, domestic mechanisms for research and acquiring and analyzing information on chemicals management were good. Nevertheless, the 2020 goal provided a strong policy rationale for continued resources for research and assessment for WEOG stakeholders. The widespread implementation of the GHS was reported to have influenced Canada’s decision to revise its existing legislation on chemicals and labeling to better align the domestic regime with the GHS.

323. For national government focal points in the LAC and AP regions, there still remained insufficient knowledge and information sharing – data collection,

---
221 SAICM/ICCM.4/INF/7, p. 3
222 SAICM/RM/Afr.5/7, p. 10
dissemination and analysis – together with insufficient cooperation between authorities responsible for different sectors. For LAC stakeholders the production of information in English represented a challenge for sharing information with technicians, workers and the general public.

324. Whilst the flow of information and knowledge from SAICM to national focal points was good, the flow of information to end-users who directly handle chemicals is limited, particularly to those in the informal sectors. However, the constraints that NFPs experienced in fulfilling their role was presented (see paragraphs 392-392, above). This issue is discussed further in ‘Conclusions and Lessons Learnt’, below.

325. For civil society, SAICM has provided well-needed funds to attend and participate in meetings and workshops enabling civil society to share experience and knowledge with other stakeholders. The information provided through the SAICM website was highlighted as very useful for NGO organisational focal points. Participating in SAICM has also raised awareness within this stakeholder group of the importance of open data.

326. Industry stakeholders recognize the unique role played by SAICM as a forum for knowledge and information exchange and highlighted the extensive work being done under the EPIs in collaboration with IOMC members. This stakeholder group reported valuing the exchange of views and experience with other SAICM stakeholders despite a lack of consensus among them on some issues.

327. The large challenge that remains in knowledge and information sharing was highlighted in the UN General Assembly Human Rights Council, thirtieth session Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes – an important part of the management of chemicals throughout the lifecycle – which highlighted the significant information gaps that exist:

Furthermore, there is no global system to generate or share missing information among all countries. This major shortcoming has resulted in a lack of available information; inability to access information; and not-so-useful information, particularly with respect to the dangers confronting those who are most at risk of harm from hazardous substances and wastes. There remain grave information gaps on numerous substances that are used, produced, released and disposed as waste by industrial and governmental activities.223

328. In the 2018 report, the UN Rapporteur highlighted the claims of confidentiality or trade secrecy that businesses made in order to limit the flow of information on chemicals. Such restrictions, the report argued, deprived workers of their rights to safe and healthy working conditions and access to remedies.224 Such concerns were also raised by civil society stakeholders (see paragraph 136, above) and NFPs (see paragraph 389, above).

329. IOMC POs stakeholders highlighted steps made in several countries for implementing the GHS, as well as significant numbers of awareness raising and

capacity building activities taking place. QSP funded projects were attributed to the success in building regulatory capacity. However, the IOMC identified several gaps in GHS implementation, stating that ‘comprehensive sectoral and global GHS implementation at the national level remains at a relatively early stage’. By August 2014, 67 UN Member States had fully or partially implemented GHS, whereas 126 States had not yet implemented GHS.

330. For the Africa region, the role of QSP in supporting the development and updating of national chemical profiles was recognized, resulting in raised awareness and guided priority setting. However, for some countries in the region, national chemical profiles do not exist, and for those that have them, they are not updated. One barrier flagged at the African regional meeting in 2013 was the lack of an adequate platform for exchanging information.

331. The QSP was identified at the fifth African regional meeting as having supported five projects, supported by UNITAR, strengthening capacities for GHS implementation. A further seven UNITAR executed QSP projects included GHS components. Nevertheless, the region remains at different levels of implementation capacity, with gaps in knowledge and understanding.

332. The Africa fifth regional meeting highlighted the absence of national chemicals databases in the region. However, it was noted that a local chapter of the Society of Environmental Toxicology and Chemistry had been established.

333. In the Latin America and Caribbean region, delegates at the fifth regional meeting in 2013, considered that some progress had been made in assessing national profile and conducting gap analyses but progress was constrained due to limited information sharing and a lack of mechanisms to share information.

334. At the fifth LAC regional meeting delegates considered limited progress had been made in implementing the GHS, citing a lack of awareness and use of GHS by customs and border control agencies and trade ministries. More generally, delegates highlighted the limited progress made in the availability of information on the dangers of chemicals. Specifically, there were gaps in relevant and useful, freely available and multilingual, up-to-date information on the dangers of chemicals in an appropriate form for non-technical stakeholder groups. For those databases that were available, there was limited knowledge on how to access these.

335. Delegates also flagged the lack of effective management systems for collection and dissemination of information across the life cycles of chemicals in the region, especially for small island developing states. They cited a general lack of involvement of industry, communities and NGOs in sharing information on chemicals across their lifecycles.

336. Underlying the lack of information on chemical in the LAC region was the

---

225 IOMC (2014) IOMC Analysis of Work Done to Implement the SAICM Global Plan of Action. Inter-Organization Programme for the Sound Management of Chemicals, p. 2
227 SAICM/RM/Afr.5/7, p.15
228 SAICM/RM/Afr.5/7, p.15
229 SAICM/RM/Afr.5/7, p.16
230 SAICM/RM/LAC.4/12, p.7
231 SAICM/RM/LAC.4/12, p. 7
232 SAICM/RM/LAC.4/12, p. 8
lack of capacity at national level for monitoring and research into the use of chemicals and the impacts on health and the environment. Delegates flagged the limited development of the basic necessary infrastructure, human capacity and financial resources to support development and implementation of an effective monitoring programme. Furthermore, the regional level lacked a well-developed and collaborative network to support effective monitoring and research.  

337. Within the CEE region, delegates at the fifth regional meeting reported that some progress had been made in the use of the GHS within the region. This was particularly the case for those countries joining the EU and working towards adherence to the Classification, Labeling and Packaging (CLP) Regulation, aligned to the UN’s GHS. For such States, safety data sheets were prepared by the European Chemical Agency (ECHA) and REACH and CLP help desks were accessible. Those countries were reported to have included the establishment of national systems on classification and labeling of chemicals into policies and to have developed draft legislation. Countries within the region had different levels of capacity for implementing the GHS.  

338. Some progress was reported in the CEE region on assessing the risks from chemicals. Again, this was attributed to those countries of the region that either were members of the EU or in the process of joining. However, delegates highlighted the lack of trained personnel and limited infrastructure such as laboratories experienced by some countries.  

339. Some countries of the CEE region reported limited progress, and other reported some progress, in the collection, management, monitoring and sharing of information needed for the sound management of chemicals using throughout the life cycles.  

Governance  

340. Over 60% of SAICM stakeholders who responded to the online survey rated achieving this objective as either ‘some success’ or ‘very successful’.  

341. WEOG stakeholders considered that regulations were already in line with the Strategic Approach, and that inter-agency and inter-departmental coordination and collaboration was strong. Within the WEOG region there was recognition that governance of chemicals management had been strengthened due to the Strategic Approach, particularly in being influential in supporting broader and more integrated engagement on chemicals management.  

342. IOMC respondents flagged the QSP as the conduit whereby progress had been made, in establishing and strengthening national chemicals management governance, although it was pointed out that many countries still needed to put in place basic legislation that would enable them to manage the risks of chemicals. According to these stakeholders, the absence of (SAICM) binding mechanisms, together with the lack of commitment and political will accounted for limitations in achieving this objective.

233 SAICM/RM/LAC.4/12, p. 8  
234 SAICM/RM/CEE.5/9, p. 17  
235 SAICM/RM/CEE.5/9, p. 17
343. The survey conducted by the secretariat designed to assess progress made against the 20 indicators listed in Table 2, above (over the period 2011-2013) revealed that for assessment of Indicator 10, only 24% of respondents had published a SAICM Implementation Plan.\textsuperscript{236} The findings of this evaluation concurred with that of the secretariat’s 2014 survey, finding that for around 50% of countries in the Africa, Asia-Pacific, Central and Eastern Europe and Latin America and the Caribbean regions, the creation of a strategic plan to address chemicals and waste was in the early stages of development or, in a few cases was yet to begin (see paragraphs 309, 331, 342 and 356, above).

344. For developing countries, evidence of the success in achieving the governance objective was the creation of multi-stakeholder national coordination committees comprising both public and private sector representatives. The SAICM secretariat survey of 2014 found that over 78% of respondents reported that such national committees were in place. Committees comprised representatives from health, environment and agricultural sectors, with growing representation of the education sector. However, the survey also found that a disproportionate number of SAICM NFPs – two thirds – were located within ministries of environment, with 9% from health and 5% from foreign affairs.\textsuperscript{237}

345. In 2014, the number of countries reporting that they had implemented the Basel, Rotterdam and Stockholm conventions, reflected through domestic legislation, was high (over 80% for the Basel and Stockholm conventions, and around 70% for the Rotterdam convention). However, the number of countries reporting implementing ILO conventions remained at under 50%. Around 45% of countries had implemented ILO Convention 170 – concerning safety in the use of chemicals at work, with less than 40% reporting that they had implemented ILO Convention No 139 – concerning prevention and control of occupational hazards caused by carcinogenic substances and agents.\textsuperscript{238}

346. The report of the UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and waste highlighted the limited implementation of ILO instruments and attributed this to both the organisational challenges within the ILO as well as the low levels of ratification of the conventions.\textsuperscript{239}

347. The findings of this evaluation highlighted that challenges remained in relation the governance objective, as many countries did not have laws governing chemicals management, and for those that did, enforcement mechanisms for implementation remained weak. Furthermore, some respondents of the online survey noted that the process of law making and establishment of regulations for chemicals management was not considered a national priority by some, and resisted by others (see Intermediate State 1, section above).

348. Over 80% of respondents to the online survey from the Africa region were of the view that there had been success in achieving the governance objective. This success was reflected in the commitments made by governments to ratify the

\textsuperscript{236} SAICM/OEWG.2/INF/4 p. 40
\textsuperscript{237} SAICM/OEWG.2/INF/4 pp. 42-43
\textsuperscript{238} SAICM/OEWG.2/INF/4 p. 44
chemicals conventions, although tempered with the recognition that further efforts were needed to fully integrate and implement chemicals management at the national level.

349. By 2015, 49 of the 54 countries within the Africa region had nominated SAICM National Focal Points, with 51 countries having ratified the Basel Convention, 45 the Rotterdam Convention and 52 the Stockholm Convention, reflecting the high level of commitment across the region to the major international chemicals conventions. This commitment was further demonstrated by the Libreville Declaration – a call for action to address health and environment issues among the 52 signatories, with the establishment of a Health and Environment Strategic Alliance.\(^{240}\)

Success in achieving this objective within the Africa region was also reflected in the widespread ratification of the Bamako Convention.\(^{241}\)

350. Success was further reflected through examples of multi-sectoral coordination operating through national coordinating committees and submission of draft laws on chemicals and waste. Other examples of success included establishment of health and safety committees, workplace policies and codes of conduct, together with workplace audits.

351. Zambia was reported to have been particularly successful in mainstreaming chemicals and wastes into national financing, through the QSP mainstreaming project. The Zambian Environment Management Authority (EMA) retains fees raised through licensing of chemicals manufacture and registration, importation and export, and uses them for monitoring and enforcement.\(^{242}\)

352. For the CEE region, GPA activities that address the governance objective included: creation of multi-sectoral and multi-stakeholder mechanisms to develop national profiles and action plans; development of comprehensive national profiles; development of national chemicals safety information exchange systems; establishment of SAICM inter-ministerial working group to advise on proposed legislation; enhancing coordination at the national level.

353. However, gaps existed for many CEE States with fragmented legislation for pesticides, a lack of data on chemicals in products, the absence of an integrated legal framework for managing chemicals together with insufficient capacity of Small and Medium sized Enterprises (SMEs).\(^{243}\)

354. For LAC respondents of the online survey, the assessment of progress towards this objective was mixed. For one, governance has been significantly strengthened through maintaining and involving communities affected by pollution in decision-making. Whilst there was recognition that progress towards enhancing governance would not have been so deep without SAICM, for others governance was limited primarily due to a lack of capacity to participate in multi-sector national, regional and international mechanisms. Fragmented regulatory structures were attributed to the low priority assigned to enforcement, codes of conduct, policy development and illegal traffic.

355. For some countries in the LAC region, activities included ratification of the chemicals related conventions – Basel, Stockholm, Rotterdam. While legal

\(^{240}\) SAICM/ICCM.4/INF/1, paragraphs 24-27

\(^{241}\) SAICM/RM/Afr.5/7, p.19

\(^{242}\) SAICM/ICCM.4/INF/1, paragraph 29

\(^{243}\) SAICM/RM/CEE.5/9, p 18
frameworks were limited for some countries, they were reported to be in the process of developing national chemical management programmes and creating coordination committees to implement these programmes. Other activities included establishing forums for national and local government, non-government organisations, and community associations to coordinate actions on chemicals and waste management.

356. At its fifth regional meeting, delegates from the LAC region, reported that limited progress had been made in the use of economic instruments (i.e. taxes) for industry to pay the external public health and environmental costs associated with chemicals throughout their life cycle.\(^{244}\)

357. For WEOG respondents to the online survey, comprehensive regulations were reported to be in place. The EU legislative requirements for the designation of nationally competent authorities with clearly defined roles, accountable to ministers, resulted in an effective enforcement regime.\(^{245}\)

**Capacity building and technical cooperation**

358. The SAICM secretariat’s survey of progress made on the indicators presented in Table 2, above, found that the number of countries providing bilateral financial assistance to improve capacity for the sound management of chemicals doubled over the period 2009 to 2013. Over the same period, an increase in the number of countries engaging in regional cooperation in capacity building for chemicals management was reported (mainly within the WEOG and ASP regions). The number of recipient countries of OECD DAC aid reporting the inclusion of the sound management of chemicals in their development assistance programmes also increased.\(^{246}\)

359. The majority of respondents in the stakeholder survey considered that SAICM had been successful in achieving this objective. Much of this success was attributed to the Quick Start Programme.\(^{247}\) IOMC POs, NGOs and the chemical industry had delivered capacity-building programmes in chemicals management. Those efforts were also recognised as having contributed to strengthened capacity at the national level.

360. Success was reflected in the exchange and information sharing workshops that have taken place. Technical expertise was provided during QSP funded projects for the preliminary work on setting up the GHS. Other training workshops included those for workplace supervisors on sound management of chemicals; training workshops for those national actors responsible for implementation of chemicals and waste related conventions.

361. A QSP project in Mali aimed at reducing use of mercury in artisanal and small-scale gold mining (in cooperation with UNIDO) laid the ground-work for the coordination and collaboration required for project formulation to establish a broader

\(^{244}\) SAICM/RM/LAC.4/12 p. 10
\(^{246}\) SAICM/OEWG.2/INF4, pp. 46-50
\(^{247}\) For a detailed review and evaluation of the QSP see SAICM/ICCM.4/INF5
regional project in this area in Francophone West Africa (Burkina Faso, Mali and Senegal), securing approximately 2.2 million USD in financing (from the GEF and the French Global Environment Facility) as well as additional in-kind contributions from other partners.\(^{248}\)

362. Despite the successes of the range of different capacity-building programmes, respondents considered that the extent and reach of these programmes was not sufficient to address the capacity constraints within developing countries. This was attributed to a number of factors including the lack of priority given to capacity building, as well as the ad hoc nature of the approach rather than a more strategic multi-stakeholder approach that included government, NGOs and industry and organizations of the IOMC.

363. Although the QSP was cited across all stakeholder groups as accounting for the success in achieving this objective, national focal points from Africa, CEE, AP and LAC all commented that the level of technical capability to manage chemicals remained too low. Some respondents attributed these shortcomings to a lack of training and information available in languages other than English. These observations resonated with civil society respondents who highlighted the low level of technical knowledge of some government technicians compounded with a lack of capacity to act to deal with the complexity of chemical safety. The paucity of accredited laboratories to identify and monitor toxic substances, particularly of vulnerable populations including women and children illustrated this lack of capacity.\(^{249}\)

364. The absence of poison centres in the Africa, Asia-Pacific and Latin America and Caribbean regions represented an institutional capacity and resource gap.\(^{250}\) As of September 2017, the Africa region had a total of 16 poisons centres in 11 countries – three in South Africa, two in Algeria, Egypt and Kenya, one in Angola, Morocco, Tunisia, Ghana, Sénégal, United Republic of Tanzania and one in Zimbabwe.\(^{251}\) 65% of the continent’s 1.3 billion people had no access to a poisons control centre.

365. For those poisons centres that did exist in the Africa region, it was reported that they were not always fully functional; cooperation and information sharing was lacking and there was limited harmonization of reporting; limited capacity to effectively manage accidents.

366. In 2017 there were a total of 77 poison control centres in 23 countries of the Asia Pacific region, with the Islamic Republic of Iran having 41 centres. In this region people living in the remaining 30 countries had no access to a centre.

367. In the LAC region, the number of centres (as of September 2017) was 72, with 38 centres in Brazil. The population of just over half of the countries in the LAC region had no access to a centre. Progress in establishing poison centers in the LAC region was assessed as limited.\(^{252}\)

368. In contrast to the other three regions, the CEE and WEOG regions were well-

\(^{248}\) SAICM/ICCM.4/INF/1, paragraph 33
\(^{249}\) SAICM/RM/Afr.5/7, p. 20
\(^{250}\) SAICM/ICCM.4/INF/7, p. 4
\(^{251}\) See WHO world directory of poison control centres available at: https://www.who.int/gho/phe/chemical_safety/poisons_centres/en/
\(^{252}\) SAICM/RM/LAC.4/12, p. 5
serviced with poison control centres. For the CEE region 16 of the 23 (70 per cent) countries in the region have a poison control centre, and for the WEOG region, 79% (23 out of 29 countries) countries have at least one poison control centre. A similar picture emerged at the fifth CEE regional meeting, where progress in the provision of training programmes and activities was assessed as limited.

369. At the Africa region fifth regional meeting, delegates pointed to the many online programmes provided by the conventions secretariat, UNIDO, UNITAR and WHO, as well as the university programme and curricula available in some countries, as evidence of achievements towards this objective. However, several gaps were also identified, including: a lack of training programmes in most countries; procedures and training programmes that did exist were not in national languages. A similar picture emerged at the fifth CEE regional meeting, where progress in the provision of training programmes and activities was assessed as limited.

370. In contrast, delegates at the LAC forth regional meeting considered that significant progress had been made in the provision and access to programmes to train specialists, in particular the establishment of customs controls under the auspices of the Montreal Protocol and the Rotterdam Convention. Nevertheless, gaps remained in the levels of technical training in the region generally, and specifically the lack of toxicologists in the health sector.

Illegal international traffic

371. Assessment of the two indicators presented in Table 2, above, showed that limited progress had been made in realizing this objective across the regions. The SAICM secretariat’s survey revealed that, in 2013, less than 20% of countries in the Africa, Asia-Pacific and Latin America and Caribbean regions were cooperating with neighbouring countries to address illegal international traffic in chemicals, with no more than 30% of respondents stating that countries were training border control agents. A similar although slightly improved picture emerged for percentage of respondents with mechanisms to prevent the illegal traffic in hazardous waste, although this was possibly driven by the Basel Convention’s legally binding obligations.

372. The findings of the SAICM survey conducted for this evaluation found that progress to achieving this objective was the least successful in the eyes of the stakeholders surveyed. Some countries with comprehensive regimes for addressing illegal traffic had taken steps to share information with developing countries. There were examples in developing countries of training for customs officers and greater regular monitoring of borders.

373. Nevertheless, illegal international traffic remained a serious threat to developing countries. Counterfeit pesticides, trade in mercury (for artisanal and small-scale gold mining), e-waste dumping, smuggling of prohibited chemicals and a lack

253 See WHO world directory of poison control centres available at: https://www.who.int/gho/phe/chemical_safety/poisons_centres/en/
254 SAICM/RM/CEE.5/9, p. 13
255 SAICM/RM/Afr.5/7, p. 20
256 SAICM/RM/CEE.5/9, p. 20
257 SAICM/RM/LAC.4/12, p. 12
258 SAICM/OEWG.2/INF/4, pp. 54-55
of public awareness and a lack of capacity of customs service were cited as some of the challenges faced in dealing with this issue.

374. Activities within the Africa region to address this objective included: capacity building and training for customs officers and magistrates; inclusion of actors responsible for the control of illicit traffic in meetings on the management of chemicals and waste; surveys identifying illegal products at the community level.

375. Delegates at the fifth Africa regional meeting identified the following gaps limiting progress towards this objective. They included: a lack of verification and information of imported or exported chemicals, products and waste; lack of ability to regulate illegal traffic and lack of enforcement of anti-corruption laws.\(^\text{259}\)

376. For delegates at the fourth LAC regional meeting, limited progress had been made in developing laboratory capacity for customs control systems, with the absence of regional instruments for customs intercommunication. This, together with a limited exchange of experiences and development of a regional strategy for the control of illegal traffic, accounted for the limited progress in achieving this objective.\(^\text{260}\)

377. In the Asia-Pacific region, the enforcement network of Ozone and Customs Officers in South Asia and South East Asia and the Pacific has been in operation since 2002. The results of the network have included: improved coordination of national customs with national Ozone Depleting Substances (ODS) units; customs giving environmental issues a higher priority; increased bilateral, regional and inter-regional cooperation among countries in curbing illegal ODS trade; greater control of ODS trade through increased efficiency and effectiveness of customs agencies.\(^\text{261}\)

\(^{259}\) SAICM/RM/Afr.5/7, p. 18  
\(^{260}\) SAICM/RM/LAC.4/12, p. 11  
Overall Impact: By 2020 Chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment

Figure 6: NFP assessment of progress made in achieving the 2020 goal

---

378. Over 55% (30) of the 52 NFP respondents from all five regions, assessed progress in meeting the 2020 goal, as either ‘haven’t started the journey’ (6%) or ‘started the journey but still a long way to go’ (52%) (see Figure 6). Several expressed the view that whilst a national SAICM strategy has been developed with its action plan, the lack of financial resources meant that it was yet to be implemented.

379. Furthermore, the issue of chemicals and waste was not dealt with in an integrated manner in all sectors and ministries. There was an identified need to enhance cooperation between different sectors and to exchange information and data between them. The issue of industrial waste and weak plans for waste management was of particular concern for one NFP.

380. For other respondents the lack of appropriate and effective policies and legislation governing chemicals management accounted for the lack of progress made. This lack was attributed to low priority for chemicals management in national development plans. For some, with limited resources, prioritizing chemicals management competed with other priorities such as eradicating poverty, provision of access to services such as potable water and sanitation services. Consequently, the visibility of the SAICM agenda at the national level was low, with one NFP conceding that not much had been achieved at the national level.

381. For many the technical expertise and infrastructure for monitoring and enforcing quality control of chemicals was lacking. This was seen to be more of a challenge than limited financial resources for one NFP. The absence of capacity to diagnose poisoning because of the lack of toxicology laboratories and specialized doctors was a concern for another. Limited staff capacity was a recurring theme in accounting for the limited progress in achieving the 2020 goal.
382. For some respondents the process of developing plans and legislation had only just started (2018). Progress had been made in harmonizing regulations, however, implementation of SAICM was reported to be at an early stage. Strengthening administrative capacity was seen as an important factor in taking the SAICM agenda forward. For others, chemicals have begun to be recognized as an important issue and gaining attention.

383. One NFP reported that stakeholders had been encouraged to take part in the conversation and to think and make plans that would foster the sound management of chemicals and waste. The journey had started but not much had been done in implementing the action plan. Nevertheless, participation in SAICM had inspired action plans and the engagement of stakeholders at the national level. In the words of one respondent, SAICM has acted as a catalyst for discussion, collaboration and action.

384. 35% (or 18 NFPs) considered that the journey was well underway to achieving the 2020 goal, with a further four NFPs (8%) of the view that the journey to achieving the 2020 goal was nearing completion, or had been completed. They cited strong and effective legislation governing the management of chemicals and hazardous wastes as a significant factor accounting for success. Extensive cooperation and coordination between government agencies and non-governmental stakeholders was another significant factor accounting for progress. Good networks between NFPs and coordination at the regional level had allowed for sharing of experiences, cooperation and collaboration on chemicals management between countries.

385. Development and implementation of the BRS conventions, together with ratification of the Minamata Convention accounted for the significant progress made in achieving the 2020 goal. The process of accession to the EU that required candidate countries to harmonize chemicals management legislation with that of the EU also accounted for progress made. The REACH regulation together with other EU legislation directives were attributed to the progress made in achieving the 2020 goal.

386. Capacity to identify, assess and categorise chemicals in use in a country was identified by respondents. For one, this amounted to 23,000 substances registered in commercial use. The presence of associated infrastructure to assess any new substances prior to introduction and the development of regulation to manage any potential risks to health and the environment, were factors accounting for progress. A dynamic and agile regulatory regime with the ability to respond to new information on chemicals and act accordingly, with regulations revised accordingly, was a further factor accounting for progress made.

387. The contrasting progress made by countries in achieving the 2020 goal was highlighted in the comparative analysis of the data collected on the indicators of progress (see Table 2). This analysis concluded that the gap between countries in different development categories (according to DAC status) was widening rather than narrowing with the greatest progress made in developed and upper-middle income countries contrasting with the little or no progress in the least developed countries. The report also concluded that international chemicals management remained at a low level, such that the current rate of progress will be insufficient to have most of the 20 indicators underway in the majority of countries by 2020.²⁶²

²⁶² SAICM/OEWG.2/INF/4, paragraphs 106, 107, 108f, 113
388. The views of the NFPs presented above, and the findings presented in the preceding paragraph, resonate with the findings of the Global Chemicals Outlook II report of the Executive Director of UNEP, presented at the United Nations Environment Assembly (UNEA): “The global goal to minimize adverse impacts of chemicals and waste will not be achieved by 2020. Solutions exist, but more ambitious worldwide action by all stakeholders is urgently required”.

389. The failure to achieve the 2020 goal is reflected in a high burden of disease from exposure to chemicals. Conservative estimates put the burden of disease from chemical exposure at 1.6 million lives, with an estimated 44.8 million lost years of ‘healthy’ life (or Disability-Adjusted Life Year DALY), in 2016. This burden has been attributed to occupational exposure to carcinogens; soils contaminated with heavy metals and other chemicals; lead exposure; acute poisoning, including from pesticides, methanol, solvents and kerosene; chemicals causing congenital anomalies. There is also increasing scientific evidence that EDCs – including some pesticides, flame retardants and plastics – even at extremely low doses are associated with disease and disability.

390. The burden of disease and disability attributable to chemicals exposure is not equally apportioned across countries, gender or age group. Occupational exposure puts workers at greatest risk, with those working in developing countries and in the informal sector experiencing the greatest risk. The numbers of workers dying from exposure to hazardous substances is increasing; in 2015 the figure was estimated at nearly 1 million workers, an increase of 90,000 on the 2011 figures.

391. Two global environmental challenges of today – climate change and biodiversity – are closely inter-related with chemicals. The chemical sector is a significant contributor to greenhouse gas emissions, accounting for over 12% of global greenhouse emissions. Whilst major chemicals companies are developing low carbon products, recent research concludes that much greater and more rapid progress will be required if this sector is to be aligned with the Paris Agreement target of limiting global warming to less than 2°C above pre-industrial levels.

392. The Intergovernmental Platform of Biodiversity and Ecosystem Services (IPBES) has highlighted the adverse impact that fertilizer runoff has had on coastal ecosystems. By 2008, such pollution was estimated to have produced 494 hypoxic or ‘deadzones’ where nutrient pollution had depleted oxygen levels required to support marine life, covering an area of more than 245,000km². Freshwater biodiversity was also found to have been adversely impacted by the chronic effects of micro-pollutants that included pesticides, pharmaceutical residues, plastics and dissolved metals. Pesticides and agricultural insecticides were found to have reduced macroinvertebrate

---

(e.g. crustaceans, insects, molluscs and worms) richness in rivers by as much as 40%.\textsuperscript{267}

393. A recent review of data (mainly from countries in the WEOG region) concluded that pollution resulting from man-made chemical pesticides and fertilisers was a significant contributor to current rates of loss of insects. These rates of loss have the potential to result in the extinction of 40% of global insect species over the coming decades.\textsuperscript{268} Such mass extinction risks undermining the essential ecosystem services that insects provide and their contribution to sustainable agricultural intensification.\textsuperscript{269}

CONCLUSIONS AND LESSONS LEARNT

394. This section reflects on the findings of the evaluation, identifying the ‘strengths’ and ‘weaknesses’ of the Strategic Approach. The framework provided in Figure 3 – the Theory of Change – is used to present this discussion. Strengths and weaknesses will focus on the outputs and outcomes of SAICM. This is followed by ‘lessons learnt’ which concludes by reflecting more broadly on SAICM as an international voluntary approach to international chemicals management and the contribution that it has made to the intermediate states and overall 2020 goal presented in the Theory of Change.

Strengths

395. SAICM is an ambitious initiative, is unique in its set-up as an inclusive multi-stakeholder, multi-sector voluntary global policy framework on sound management of chemicals and waste. It has provided a space and opportunity for government and non-government actors alike, to discuss and deliberate on the management of chemicals and chemicals in products throughout their lifecycle within an atmosphere of relative trust and cooperation.

396. The multi-stakeholder approach character of SAICM has been maintained since the initial meeting in Dubai in 2006. A particular strength has been the participation of non-government actors in the SAICM process, to the extent that they are represented in the decision-making bodies, allowing for their perspectives and priorities to be heard and considered as resolutions were framed and agreed. The numbers of non-government actors attending ICCM has nearly doubled from 45 representatives at ICCM1 to 93 representatives at ICCM4. This participation has been made possible because of the voluntary nature of SAICM.

397. SAICM delivered its outputs – the conferences and intersessional meetings have resulted in a set of highly relevant agreed resolutions. The initial resolutions at ICCM1 and ICCM2 provided the organisational structure and management that


enabled SAICM to function, the mandate for the secretariat to carry out its work, the modalities for establishing an emerging policy issue and the management and organizational structure needed to establish the QSP.

398. The resolutions deliberated and agreed at ICCM2 and subsequent conferences established forums for discussing chemicals issues that were of significant concern – the EPIs – and agreeing action plans to address the challenges that they created. The forums established for each EPI also reflected the multistakeholder and multisector ambition of SAICM, with a number of IOMC participating organisations chairing the forums that comprised representatives from governments and non-government organisations including representatives from industry and civil society.

399. In addition to the resolutions agreed at each Conference, procedures were also agreed for inclusion of additional activities in the GPA. Modalities for reporting on a range of indicators that aimed to monitor progress of SAICM-related activities in promoting the sustainable management of chemicals throughout their lifecycle were also agreed. At ICCM4 (Resolution IV/1), the eleven basic elements of the OOG for achieving the 2020 goal were agreed. There was recognition that these elements were critical at the national and regional levels for the attainment of sound management of chemicals and waste management. The IOMC provided further contributions to the discussion on a system for monitoring progress through its proposed 10 quantitative indicators.

400. As well as having success in delivering the outputs identified in the Theory of Change (Figure 3), SAICM had notable successes in delivering on the outcomes. The adoption of resolutions creating EPIs and other issues of concern has resulted in raising their international profile.

401. Delivering on the Lead in Paint EPI is one of SAICM’s greatest successes. The establishment of a Global Alliance to Eliminate Lead in Paint under the auspices of the UNEP and WHO comprising a partnership of governments, intergovernmental organisations and NGOs. By 2019, the Alliance had achieved its 2015 target of 70 or more countries having put in place regulations to control lead in paint. The Alliance has run effective annual international campaigns, raising awareness of the dangers of lead in paint, as well as conducting sampling of paints in the Africa, Asia-Pacific and Latin America and the Caribbean regions.

402. There is evidence of some success in delivering outcomes from other EPIs. For the Chemicals in Products EPI, UNEP the lead agency, succeeded in engaging representatives from the toy, electronics, clothing and construction sectors around the gaps, obstacles and common areas of interest. Efforts made under this EPI culminated in a proposal submitted to ICCM4 for a voluntary international programme for information on chemicals in products along their supply chain agreed to at ICCM4.

403. Outcomes on the nanotechnologies and manufactured nanomaterials issue centred on awareness-raising workshops, pilot activities and production of a report, e-learning course and production of on-line assessment tools. Following on from UNITAR’s awareness-raising workshops for nanotechnologies EPI, the Government of Thailand approved a five-year “National Nanosafety and Nanoethics Strategic Plan”.

404. The QSP represents another notable successful outcome for SAICM. Over the 10 year period there were 184 approved projects with 70 completed by 2015. The portfolio of projects addressed all five OPS objectives.
There is evidence that political and technical awareness and understanding of the risk of chemicals, and the tools available to manage risks were enhanced through participation in QSP projects. Projects succeeded in creating an enabling environment for the sound management of chemicals at the national level in many developing countries. The QSP was attributed, by many across the stakeholder groups, to have enabled multi-sectoral exchange of information through the establishment of inter-ministerial and inter-agency coordination committees. There were instances where the QSP project resulted in the mainstreaming of chemicals management into national legislation and leveraging of external financing for continued work.

SAICM has made some progress in developing monitoring and evaluation framework for assessing progress made towards the 2020 goal. This can be viewed as an evolving process, from the indicators defined within the GPA to the 20 indicators of progress presented at ICCM2, to the most recent OOG comprising the 11 basic elements presented at ICCM4.

SAICM stakeholders have had some success in effectively influencing the drivers affecting SAICM outcomes (see Figure 3). The SAICM secretariat (despite significant financial constraints) was effective in providing support to ICCM and its subsidiary bodies. This support was central to the success delivery of the SAICM outputs.

There has been much collaboration between SAICM stakeholders. The IOMC organisations have led on the EPIs and played the role of executing agencies for 76 of the QSP projects. The governing bodies of some IOMC organisations have passed resolutions in support of SAICM. Government and non-government agencies participate at conferences, the OEWG and regional meetings. The SAICM secretariat engages with all SAICM stakeholders.

Funding for the QSP represents an important success for SAICM. Over the 10 year period, donors contributed US$ 41 million to support QSP projects. Four donors contributed 73% of this funding – EU, Sweden, Norway and the USA.

Stakeholders demonstrated their commitment to SAICM more broadly through in-kind contributions and cash for a range of SAICM-related activities. Several governments provided funding for specific activities under the EPIs, for example, to convene meetings and workshops and pilot projects. In-kind contributions included hosting regional and OEWG meetings and publication of SAICM texts. The GEF approval in 2018, of a project to address ‘Global best practices on emerging chemical policy issues of concern under SAICM’ represents a welcome contribution including significant co-financing from multiple partners.

Weaknesses

Whilst much effort has been made by stakeholders to take forward the EPIs and to deliver on this SAICM outcome, the work plans (in cases where workplans were developed) and outcomes of some of the emerging policy issues were limited in their ambition and scope. Several activities were delayed because of lack of funds and/ or capacity of the lead organisations to take the agendas forward. In the case of HSLEEP the initial workshop called for in Resolution II/4 was delayed for a year while funding was secured. This EPI continues to be constrained by funding issues,
and currently (2019) activities to address this EPI, agreed in Resolution IV/2, remain unfunded and several have not been implemented.270

412. The slow progress in formal recognition of HHPs as an EPI has been a cause of frustration for several SAICM stakeholders. A resolution addressing this issue was approved by the Conference at ICCM4 – Resolution IV/3. However, whilst welcoming the FAO, UNEP and WHO strategy to address HHPs, Conference did not define HHPs as an EPI, but rather as an issue of concern.

413. The full potential of outcomes from the QSP was not realised for a number of reasons that included: many publications were produced as a result of QSP projects, these are yet to be made widely accessible through a centralized system of content management and retrieval; gender dimensions of chemical use and exposure were addressed in a small minority of the projects.

414. The third SAICM outcome – monitoring progress through the 20 indicators (see Table 2) - had a number of weaknesses. Firstly, methodological issues related to a lack of clarity as to whether respondents to the data collection survey were reporting on the relevant period, and the interpretation of the questions asked for each indicator. Secondly, the 20 indicators are outputs based, with the absence of a complementary set of indicators that assesses outcome and impact.

415. The drivers of change were constrained in their effectiveness to facilitate the SAICM outcomes. The SAICM secretariat was hampered in its capacity to deliver on its mandate, primarily because of a chronic shortage of funds throughout the 10 year period. The annual shortfall in approved funding for the secretariat was at least 43% for six of the 10 years. This shortfall resulted in an under-capacity of staff for all but 10 months of the 10 year period. This under-capacity impacted on the management of the QSP. It also resulted in the lack of a SAICM information clearing house, which itself affected the second driver ‘information sharing and collaboration’.

416. The full potential of the driver of ‘information sharing and collaboration’ was limited in enabling the outcomes to be fully realised. By 2015, at ICCM4, SAICM stakeholders continued to raise concerns over the lack of commitment at the highest levels of some UN agencies to formally commit to SAICM, and called for this commitment in Resolution IV/1. Strengthening formal collaboration between the SAICM and BRS secretariats was slow. It was not until 2014 that a taskforce was established to assess possible areas of collaboration and cooperation.

417. Limited sharing of information between SAICM stakeholders on chemical composition of products as well as hazard and risk assessment data, was flagged by many stakeholders. These concerns were also raised in 2019, in the Global Chemicals Outlook II –Summary for Policymakers, as was the lack of agreed methodologies for chemical hazard and alternatives assessment.271

418. Despite the multi-stakeholder ambition of SAICM, several important groups of stakeholders are missing from the SAICM process and structure, in particular academia. Offers were made at ICCM2 to host a scientific meeting prior to ICCM3 but these were declined. No scientific body is integrated into SAICM to support its work.

270 SAICM/OEWG.3/6, paragraph 33
271 UNEP/EA.4/21, p. 2
419. Industry representation at SAICM is limited to the chemical producing industry. Many organizations with an interest in the SAICM agenda are absent. These include: downstream uses of chemicals, retailers, downstream users that have created labeling schemes often driven by consumer demand.

420. Throughout the 10 year period (2006-2015) the issue of secure and sustainable financing has been discussed at each Conference. Insufficient progress had been made on taking forward the mainstreaming and industry involvement components of funding identified in the integrated approach to the sustainable financing of sound management of chemicals and waste proposal, welcomed at ICCM3. The findings from this evaluation (and the QSP evaluation of 2015) reveal that many Governments are yet to fully mainstream SAICM into national plans and budgets, and few governments have applied economic instruments to fully internalize the externalities generated by chemicals production, use and disposal.

421. The potential of SAICM to deliver its outcomes has been limited by insufficient external donor funding. With the exception of the QSP, SAICM stakeholders have been limited in their ambition to take forward the EPIs, supported by a fully funded secretariat.

**Lessons Learnt**

422. The previous section reflected on the strengths and weaknesses of the SAICM project to deliver on its outputs and outcomes, as articulated in the Theory of Change developed for this evaluation. In this final section, the contribution of the SAICM project to the broader goals of SAICM are discussed.

423. Strengthened capacity, commitment, technical knowledge and political will to implement and mainstream SAICM (Intermediate State 1) was reflected in: progress in coordination within government and stakeholder engagement and collaboration; development of strategic plans to address chemicals and waste; progress in regional cooperation.

424. Much of the success of SAICM in contributing to this intermediate goal depended upon the NFPs. The structure of SAICM was such that it is through the NFPs that the SAICM agenda was promoted and taken forward at the national level. Their role was to bring together all stakeholders, encouraging buy-in and mobilizing resources. Through this networking NFPs were expected to support the preparation of national strategic plans and to support the integration of the sustainable management of chemicals and waste at the regional level.

425. Evidence from this evaluation indicates that NFPs were constrained in their ability to fulfill their role by a number of factors. Firstly, over 80% were located within the environment sector. The relative lack of power and influence of this sector to shape national agendas, together with the sectoral structure of government, constrained NFPs in delivering on their mandate. Furthermore, little guidance was provided to NFPs in fulfilling their role. The Africa region presented a proposed set of guidelines (job description) at ICCM2. However, this was not formally approved and remained a proposal.

426. SAICM was conceived as a multi-stakeholder approach. Integration across sectors is a key factor to achieving the 2020 goal. Greater capacity and increased
representation of the health, agriculture, finance and industrial sectors within
government national and regional focal points will support efforts to mainstream the
sound management of chemicals across government departments. Within non-
government stakeholders, continued efforts to communicate with and reach out to
downstream businesses and industries as well as civil society.

427. A second factor constraining the functions of the NFPs was the low political
priority accorded to SAICM objectives. This was reflected in many NFPs holding
relatively junior positions with multiple responsibilities. The low budgets allocated to
SAICM-related activities resulted in the NFP role being ‘invisible’ with the agencies
that they were situated.

428. Ultimately, the success of SAICM rests on national governments having the
political will to legislate for the sound management of chemicals and to ensure that
such legislation is fully implemented. SAICM stakeholders play several roles in
pushing chemicals management higher up the political agenda: governments signing
up to international conventions and forums (i.e. SAICM) and developing regulatory
frameworks that Government have the capacity to monitor and enforce; engaged and
responsive UN agencies supporting national and regional implementation; a strong
and independent civil society, enshrined in law, advocating for sound chemicals
management.

429. Building capacity and skills of NFPs to engage with all stakeholders,
government, civil society and business, raising the profile of the NFP role and
allocating adequate resources, will enhance SAICM’s effectiveness at contributing to
the intermediate goals of strengthened capacity, technical knowledge and political
will to implement SAICM.

430. This evaluation has found much evidence of SAICM stakeholders contributing
to the five OPS objectives – Intermediate State II in the Theory of Change. Governments have introduced legislation, have signed up to international conventions;
donors have contributed significant resources, including for the QSP, that has resulted
in projects that addressed all five OPS objectives; IOMC participating organisations
have provided skills and capacity training, provided a wide range of manuals,
guidelines and technical expertise; civil society has supported the most vulnerable
members of society, collecting evidence of practices and processes that have led to
damaging health and environmental impacts of chemicals, and introduced projects
aimed at avoiding such impacts; industry has provided resources, training
programmes and introduced its Responsible Care programme aimed at promoting safe
chemicals management throughout the chemical supply chain.

431. Despite these efforts, this evaluation has found that there is broad consensus
among SAICM stakeholders and others that the 2020 goal, the overall impact that
SAICM seeks to support, will not be achieved. Further, the evidence suggests that the
gap between countries in achieving this goal is widening with the poorest countries
and communities being left behind.

432. Reducing inequality within countries in regard to chemicals management will
require further efforts by SAICM stakeholders to reduce vulnerable and marginalised
groups to chemicals exposure at work, in the home and in the environment.
There are some 168 million working children aged five to 14, 100 million of who work in agriculture.\textsuperscript{272} A substantial body of evidence demonstrates the risks to the health of millions of women and children in developing countries from exposure to chemicals on the farm, and in the home, as well as the risks of fetal death and birth defects through mothers’ exposure.\textsuperscript{273} There are some 168 million working children aged five to 14, 100 million of who work in agriculture.\textsuperscript{274} A substantial body of evidence demonstrates the risks to the health of millions of women and children in developing countries from exposure to chemicals on the farm, and in the home, as well as the risks of fetal death and birth defects through mothers’ exposure.\textsuperscript{275} Increased effort of SAICM stakeholders to work in partnership to take action on HHPs and promote agro-ecology, will both protect and enhance biodiversity and minimize the adverse impacts on health from exposure to chemical inputs for these vulnerable groups.

Reducing inequality between countries, will require strengthened adaptive management regimes in developing countries. Such regimes depend on access to knowledge, science and technology. Continuing the progress made in building national technical capacity as well as supporting the provision of technical infrastructure (such as poisons centres) will support such regimes. Effective monitoring and evaluation systems, together with sound science, will provide the information and assessments needed to shape future management regimes.

A particular challenge highlighted in this evaluation has been the contested nature of the risks and hazards associated with chemicals. In the early days of ICCM offers were made by institutions to host a science forum, enabling a scientific perspective to be incorporated into the Conference’s structure. Discussions about such a forum have now come to the fore.\textsuperscript{276} Such a forum has the potential to develop internationally agreed methodologies for risk and hazard assessment that SAICM stakeholders can agree to, and to adhere to the decisions made by such a forum across all regions.

Realising the objectives and goal of SAICM depend on sufficient levels of financing and resources. Securing sufficient funds has been a constant challenge for SAICM over the 2006-2015 period. Further success of SAICM will require secure and sustainable funding through: Governments mainstreaming SAICM objectives and activities into national development plans with associated budgets; introduction of appropriate economic instruments based on principles of polluter pays; donors continuing to deliver on external finance commitments.

The SAICM secretariat has been constrained in delivering on its functions over the period 2006-2015 because of a persistent shortfall in resources. Beyond 2020, a fully functioning secretariat at full capacity will be required to support any future

mission of protecting human health and the environment from harmful effects of chemicals and waste.

438. SAICM is an ambitious initiative, is unique in its set-up as an inclusive multi-stakeholder, multi-sector voluntary global policy framework on sound management of chemicals and waste. A particular strength has been the participation of non-government actors in the SAICM process, allowing for their perspectives and priorities to be heard and considered as resolutions were framed and agreed. Retaining this strength and character beyond 2020 will support the future mission.