Citizens' Report

Implementation of the Strategic Approach to International Chemicals Management (SAICM) by IPEN Participating Organizations 2012 - 2015

September 2015

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List of abbreviations

BAT	Best Available Techniques
BEP	Best Environmental Practices
BRI	Biodiversity Research Institute
CEE	Central and Eastern Europe
CMR	Carcinogenic, Mutagenic or toxic to Reproduction
CSO	Civil Society Organization
DDT	Dichlorodiphenyltrichloroethane
EECCA	Eastern Europe, Caucasus, and Central Asia
EU	European Union
FAO	United Nations Food and Agriculture Organization
GAIA	Global Alliance for Incinerator Alternatives
GEF	Global Environment Facility
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
GPA	Global Plan of Action
HCWH	Health Care Without Harm
HHP	Highly hazardous pesticides
IAASTD	International Assessment of Agriculture Science and Technology for Development
ICCM	International Conference on Chemicals Management
IMEAP	International Mercury Treaty Enabling Activities Program
IPM	Integrated Pest Management
ISIP	International SAICM Implementation Project
NGO	Nongovernmental Organization
OPS	Overarching Policy Strategy
PAN	Pesticide Action Network
PBT	Persistent Bioaccumulative and Toxic Substance
PCB	Polychlorinated biphenyl
POP	Persistent Organic Pollutant
PRTR	Pollutant Release and Transfer Register
REACH	Registration Evaluation Authorization and Restriction of Chemicals
SAICM	Strategic Approach to International Chemicals Management
SDG	Sustainable Development Goal
UNEP	United Nations Environment Programme
WHO	World Health Organization

Executive Summary

Public Interest NGO Contributions to Implementation of the Strategic Approach to International Chemicals Management (SAICM)

Public interest non-governmental organizations (NGOs) and civil society organizations (CSOs) have important roles to play in successful SAICM implementation. The SAICM Overarching Policy Strategy (OPS) addresses the need for a *"...multi-stakeholder approach in pursuing the sound management of chemicals,"* and asserts the need to *"...promote and support meaningful and active participation by all sectors of civil society, particularly women, workers and indigenous communities, in regulatory and other decision-making processes that relate to chemical safety."*[1] This report documents extensive work conducted by public interest NGOs and CSOs around the world to implement SAICM activities corresponding to all the principal SAICM objectives.

In the time period 2012 – 2015, IPEN developed and executed activities to promote effective SAICM participation and undertake enabling and implementation activities for NGOs and CSOs in developing and transition countries with the following elements:

- **Elimination of lead paint:** IPEN scaled up its Global Lead Paint Elimination Campaign to implement two major regional projects in Asia and Africa, conduct a 9-country study of lead levels in paint in collaboration with UNEP, and engage in many national activities. National regulations restricting the use of lead in paint have been enacted, drafted or promised in at least seven countries: Sri Lanka (enacted), Philippines (enacted), Nepal (enacted), Indonesia, Thailand, Bangladesh and India (regulation likely in 2015 or 2016).

- **Heavy metals program:** The IPEN Mercury-Free Campaign advocated for the development of a strong global treaty, conducted monitoring studies in fish and hair, and worked to raise awareness about mercury exposure and safer alternatives. During this period, IPEN presented its newly adopted *Minamata Declaration on Toxic Metals* at an international skillshare in Minamata and in 2014 launched a global Mercury Treaty enabling activities program which currently has 27 project activities in 29 countries.

- **China chemical safety:** The China Chemical Safety Project worked to strengthen the capacity of civil society organizations and communities impacted by pollution and increase chemical safety in China. This included training on public participation in Environmental Impact Assessment and generating new publicly available data about pollution, including 11 case studies and new data on POPs in chicken eggs near polluting facilities. Target project regions included communities impacted by pollution in Beijing, Guangdong, Guangxi, Hebei, Heilongjiang, Henan, Hubei, Hunan, Inner-Mongolia, Jiangxi, Shandong, Shanghai, Sichuan, and Zhejiang provinces.

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[1] SAICM Overarching Policy Strategy paragraphs 9 and 16
[2]United Nations Environment Programme (2012) Global Chemicals Outlook
[3] Emerging Policy Issues: Lead in Paint (resolution II/4 B)
http://www.saicm.org/index.php?option=com_content&view=article&id=394:emerging-policy-issues-lead-in-paint-resolution-ii-

- **Targeted work on SAICM emerging policy issues:** IPEN Participating Organizations have actively engaged on SAICM's current emerging policy issues: lead in paint (see above); chemicals in products; hazardous substances within the life cycle of electrical and electronic products; nanotechnologies and manufactured nanomaterials; and endocrine disrupting chemicals. In addition, significant work has elevated the issue of highly hazardous pesticides within the SAICM process, as well as within countries and communities.

- **Work on SAICM Global Plan of Action items in eight IPEN regions:** Overall, we have documented more than 500 activities conducted by IPEN Participating Organizations that relate to SAICM implementation in the period from 2012 - 2015. This includes work on 228 of the 299 items (76%) in the SAICM Global Plan of Action (GPA), including many of the recently added items related to nanomaterials and electronics. The work includes all five principal Overarching Policy Strategy (OPS) Objectives: risk reduction, knowledge and information, governance, capacity building, and illegal traffic.

SAICM implementation activities during the 2012 – 2015 time period cover a wide variety of issues including monitoring products, food, paint, and humans for toxic metals and chemicals; promoting substitution with safer alternatives; implementing ecological agriculture; addressing toxic chemicals in manufacturing and wastes; public awareness-raising for vulnerable groups; characterization of hotspots; and work to eliminate illegal traffic of chemicals and wastes.

NGOs will continue contributing to chemical safety objectives within the limitations of available and accessible resources. Unfortunately, many NGOs around the world are still unaware of SAICM and lack access to the necessary resources and capacity to participate meaningfully as effective stakeholders. IPEN will continue to encourage NGO implementation of SAICM by linking efforts of Participating Organizations around the world, providing expertise and resources, and conducting actions which build capacity among national- or community-based NGOs. Predictable, accessible and additional resources to continue and expand these joint programs on SAICM outreach and implementation will build NGO capacity, increase NGO-government dialogue, and greatly advance the common SAICM 2020 goal.

Public Interest NGO Views of SAICM Implementation

SAICM implementation has advanced in all regions, though somewhat unevenly and still in an evolving manner. Redoubled efforts are required to advance toward the 2020 goal, while planning for global cooperation on chemical safety beyond 2020. Some countries have proceeded to establish multi-stakeholder frameworks that provide information and begin to address a variety of chemical safety challenges including national governance, management of metals, and hazardous wastes. In some cases, countries recently developed plans for SAICM implementation, indicating the need for extended time to fully implement its goals. Sometimes, a specific SAICM issue (such as lead in paint) draws government, public health, industry, and public interest NGO stakeholders into coordinated action. The SAICM Quick Start Programme Trust Fund has also helped countries build the capacities of regulators and policy makers on chemical safety issues and helped countries address some specific needs. Continuing this momentum will be critical for the sustainability of the advances SAICM has helped achieve.

Despite some tangible advances in chemical safety, no country could say that they are close to reaching the SAICM 2020 goal. The political status of SAICM remains low and very few governments have adopted SAICM as a key strategic framework in the management of chemicals throughout their life cycle. SAICM themes might be circulated within federal institutions in the capital city, but are usually not disseminated among state or local authorities that actually have to implement policies on the ground. These problems are compounded by a frequent lack of sufficient budgets allocated to the chemical safety agenda, which comes from the relatively low rank chemicals occupy even compared to other environmental issues such as climate change and biodiversity. Economic instruments that provide cost recovery from the chemical industry and earmark funds for chemicals management could be helpful but they are rare in developing and transition countries. No global agreement for cost internalization by the chemical industry has appeared, despite the large amount of money that could be available to governments for sound chemicals management even by receiving only a small percentage of the industry's global sales, which total more than USD$4.1 trillion.[2] Adequate means of implementation will be required to meet the agreed SAICM 2020 goal and continue chemical safety efforts beyond 2020, and this includes sufficient and sustainable financing.

As countries struggle to evaluate, strengthen, or create regulatory infrastructure, poor enforcement of new or existing laws undermines chemical safety objectives. Often the regulated industry lobbies to weaken chemical safety regulations during their formulation or after they already exist. Weak laws, poor enforcement, and lack of industry responsibility play a key role in continuing problems of chemicals regulation and waste management. Key chemical safety principles such as precaution, inter-generational equity, no data – no market, right to know, substitution, and polluter pays are alluded to, but not operationalized. The costs and harms of hazardous waste, obsolete pesticide stockpiles, e-waste dumping, and even municipal waste are usually externalized onto governments or handled with inappropriate techniques that generate even more pollutants. Information is a key component of SAICM's objectives and the basis for safer substitution, but information about chemicals in the workplace and in products is insufficient and workers and the public are often not aware of the potential threats. In addition, the public often does not have access to monitoring data of industrial emissions, which would provide a transparent means of mobilizing public support for cleaner production. Overall, public and media awareness of chemical safety remains low and meaningful participation of the civil society in decision-making or implementation related to chemical safety policies is thin.

One of SAICM's key pillars establishes the inherent link between chemical safety and sustainable development. Donor government delegates at SAICM preparatory meetings raised expectations that international development assistance agencies would provide substantial funding for SAICM implementation. This has not yet occurred on a significant scale and needs to be further pursued. Few developing countries have successfully mainstreamed chemicals management into development assistance plans. An even deeper issue considers what is actually meant by development and what kind of development is appropriate for a country. The true cost of resource extraction, chemical-based agriculture, industrial production, end-of-life toxic-product exposures, and other activities is often vastly underestimated or not even considered when development decisions are taken.

[2]United Nations Environment Programme (2012) Global Chemicals Outlook

Conclusion

More than 120 IPEN Participating Organizations actively executed more than 500 activities in 65 countries in all UN regions to work towards implementing all five objectives of the SAICM Overarching Policy Strategy and 228 of the 299 items in the Global Plan of Action, including the recently added items on nanomaterials and electronics. IPEN developed and carried out a Global Lead Paint Elimination Campaign in two major regions; launched global Mercury Treaty enabling activities; conducted extensive work to strengthen the capacity of civil society organizations and communities impacted by pollution and increase chemical safety in China; and actively engaged on all of SAICM's current emerging policy issues.

Key features of SAICM's importance include its high level of political endorsement and the multitude of ways in which it links chemical safety to sustainable development, financing, regulatory infrastructure, enforcement, coherency in coordination across ministries and stakeholders, and key chemical safety principles such as right to know, substitution, polluter pays and others. At this decisive point, SAICM needs re-commitment from its stakeholders to work towards its 2020 goal and plan for cooperation beyond 2020. SAICM has so far devoted itself primarily to enabling activities for the sound management of chemicals. Beyond 2020 the main focus should become the utilization of these new capabilities and frameworks to take actions at country and local levels to minimize and eliminate actual sources of toxic exposure. Adequate financing and raising the political priority given to chemicals management will play key roles in improving how chemicals are produced and used in order to prevent harms to human health and the environment. Highly motivated public interest NGOs and CSOs are working diligently to support and promote SAICM's objectives in all parts of the world.

Organization of the Citizens' Report

This report describes the state of SAICM implementation around the world from the perspectives of public interest NGOs and CSOs. It documents progress, and points to directions where more work is needed. It also provides an extensive sample of the work of public interest NGOs and CSOs around the world to protect human health and the environment from hazardous chemicals.

The report describes five key elements of SAICM implementation by IPEN Participating Organizations:

- Elimination of lead paint
- Heavy metals program
- China chemical safety
- Targeted work on SAICM emerging policy issues
- Work on SAICM GPA items in eight IPEN regions

Since IPEN's 700 Participating Organizations are primarily self-organized by geography and language, the report presents information from the following regions: Anglophone Africa; Central and Eastern Europe (CEE); Eastern Europe, Caucasus, and Central Asia (EECCA); Francophone Africa; Latin America and the Caribbean; the Middle East; South Asia; and Southeast Asia, East Asia and the Pacific.

Taken together, the report provides a rich narrative picture of how public interest NGO and CSO activities relate to specific concrete items in the Global Plan of Action and specific objectives of the Overarching Policy Strategy. Instead of counting indicators, the report describes the breadth of actual work; the extent to which national plans have been created, multi-stakeholder mechanisms set up, new information from monitoring, the degree of public participation in planning and implementation, training programs carried out, educational materials developed and distributed, and many other activities. There is no completely satisfactory way to document SAICM implementation, but the Citizens' Report provides a window into the myriad ways public interest NGOs and CSOs approach SAICM and their deep dedication to the 2020 goal.

Elimination of lead paint

Ending the manufacture and use of leaded decorative paint is critically important for global elimination of lead exposure, particularly in developing and transition countries. Damage to children's brains from lead exposure is lifelong and irreversible, and effects are seen at lower and lower blood lead levels. Experts have determined that no safe level of lead exposure has been established. For these reasons, use of lead in paint has been banned in most industrialized countries for more than 40 years. However, paint with high lead levels continues to be widely sold and used in most developing countries.

The high economic burden associated with childhood lead exposure suggests that widespread lead exposure from decorative lead paint also is a significant impediment to the achievement of a country's economic development objectives, particularly in low- and middle-income countries.

At ICCM2 in 2009, 120 delegates unanimously agreed to adopt a resolution on lead in paint[3] proposed by IPEN that called for an end to the production and use of lead paints in all countries, and for the establishment of a global partnership to promote lead paint elimination to be convened by United Nations Environment Programme (UNEP) and the World Health Organization (WHO).

UNEP and WHO convened the first meeting of the Global Alliance to Eliminate Lead Paint (GAELP) in 2010. GAELP's broad objective is to *"phase-out of the manufacture and sale of paints containing lead and to eventually eliminate the risks from such paint."*[4] GAELP's Business Plan establishes as a key indicator of success that by 2020, *"legally binding laws, regulations, standards and/or procedures to control the production, import, sale and use of lead paints with special attention to the elimination of lead decorative paints and lead paints for other applications most likely to contribute to childhood lead exposure" will be promulgated in all countries."*[5] Another agreed indicator of GAELP's success is that all paint manufacturers will have, by 2020, eliminated the use of added lead compounds in the paints they produce for use in these priority areas.

IPEN has been an active participant in GAELP from the start. It is a member of the GAELP Advisory Group, promotes participation in GAELP, and works with NGOs to promote GAELP objectives. IPEN developed two modules in the GAELP Toolkit to be released in 2015 (*Alternatives to Lead in Paint* and *Challenges for Small and Medium Sized Paint Manufacturers*), and provided content to other modules such as analytical lead paint data.

Since ICCM2, IPEN-affiliated NGOs and others have sampled and analyzed paints on the market in approximately 40 low- and middle-income countries.[6] Twelve of these studies were carried out with UNEP support.[7] All these studies show that where no enforced regulation is in place to restrict the use of lead in paint, a majority of the paints on the market will contain high levels of lead.

During 2012 - 2015, IPEN scaled up its Global Lead Paint Elimination Campaign to implement two major regional projects in Asia and Africa, conduct a 9-country study of lead levels in paint in collaboration with UNEP, and engaged in various other national activities related to lead paint elimination.

The 7-country *Asian Lead Paint Elimination Project*[8] (2012-2015) was funded by the European Union's SWITCH-Asia program to support national lead paint elimination activities. The project was conducted with NGO partners: Environment and Social Development Organization (ESDO),

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[3] Emerging Policy Issues: Lead in Paint (resolution II/4 B) http://www.saicm.org/index.php?option=com_content&view=article&id=394:emerging-policy-issues-lead-in-paint-resolution-ii-4-b&catid=89&Itemid=528

[4]Information about GAELP can be found at: http://www.unep.org/chemicalsandwaste/Home/tabid/197/chemicalsandwaste/LeadCadmium/PrioritiesforAction/GAELP/tabid/6176/Default.aspx

[5]Global Alliance to Eliminate Lead Paint Business Plan: http://www.unep.org/chemicalsandwaste/Portals/9/Lead_Cadmium/docs/Info/business_plan_en.pdf

[6]http://ipen.org/sites/default/files/documents/ipen-booklet-lead-v1_3-web.pdf

[7]Ibid.

[8]For more information: http://ipen.org/projects/asia-project-2012-2015

Bangladesh; Toxics Link, India; Balifokus, Indonesia; Centre for Public Health and Environmental Development (CEPHED), Nepal; EcoWaste Coalition, Philippines; Centre for Environmental Justice (CEJ), Sri Lanka; and Ecological Alert and Recovery Thailand (EARTH), Thailand.

IPEN and UNEP expanded the number of countries with clear data showing high levels of lead in paint in *Lead in Enamel Decorative Paints*[9](2013). National partners in the lead paint studies were: Association d'Education Environnementale pour la Future Génération (AEEFG), Tunisia; Ecological Restorations, Ghana; Jeunes Volontaires pour l'Environnement (JVE), Ivory Coast; Independent Ecological Expertise, Kyrgyzstan; Observatorio Latinoamericanos de Conflictos Ambientales (OLCA), Chile; Pesticide Action Network Uruguay (RAPAL), Uruguay; Pesticide Action Nexus Association (PAN-Ethiopia), Ethiopia; Ruzgar Ecological Society, Azerbaijan; and Taller Ecologista, Argentina.

IPEN also secured a medium-sized project from the Global Environment Facility (GEF) to be executing agency for the *African Lead Paint Elimination Project*[10] (2014-2017) supporting national lead paint elimination activities in four African countries, with UNEP as implementing agency. Partners in the project are Centre de Recherche et d'Education pour le Développement (CREPD), Cameroon; JeunesVolontaires pour l'Environnement (JVE), Ivory Coast; Pesticide Action Nexus Association (PAN-Ethiopia), Ethiopia; and Agenda for Environment and Responsible Development (AGENDA), Tanzania. In addition, selected activities will be implemented in at least five more African countries under the project.

Activities in both the African and the Asian projects include studies of lead levels in paint; outreach to paint manufacturers to disseminate information about the hazards of lead in paint, especially to children's health, and dialogue to promote reformulation of lead-containing paint; outreach to policy-makers to encourage enactment of national regulation restricting the use of lead in paint; and establishing and promoting the Lead Safe Paint Certification program.

To date, IPEN's Global Lead Paint Elimination Campaign has achieved the following:

- National regulations restricting the use of lead in paint have been enacted, drafted or promised in at least seven countries: Sri Lanka (enacted), Philippines (enacted), Nepal (enacted), Indonesia, Thailand, Bangladesh and India (regulation likely in 2015 or 2016).
- Recent paint studies conducted by IPEN NGOs in Asia suggest that, with a few exceptions, paint companies with the largest national market shares have shifted to products with less than 90 parts per million (ppm) lead content, the standard in the U.S. and other industrialized countries. This is a direct result of IPEN's work on this issue since 2008.
- Paint companies with majority market share (90%) in the Philippines have applied to be part of the world's first third-party certification program for lead content of paint. The program, Lead Safe Paint Certification, was pioneered by IPEN and its NGO partner EcoWaste Coalition, and assures a lead content below 90 ppm in certified paint.

[9] *Lead in Enamel Decorative Paints*
http://www.unep.org/chemicalsandwaste/Portals/9/Mercury/Documents/publications/Lead_in_Enamel_decorative_paints.pdf
[10] For more information: http://ipen.org/projects/africa-project-2014-2016

- IPEN has developed a relatively inexpensive methodology for sampling and analyzing paints, and for reporting results that any reasonably competent national partner (even one with minimal technical expertise) can easily implement.
- IPEN has developed a set of tools and strategies that ensure accurate and consistent messages from country to country and that make it easy for national NGO partners to engage with partners to prepare and release their own national lead paint reports and communicate with target audiences. These tools include: media and report templates; technical information on the hazards of lead paint; the availability of good paint ingredient substitutes and a general outline on how to apply them in a reformulation process; comparisons with the lead content of paints in other countries; strategies for working with paint companies and associations; and potential recommendations to national governments, paint companies, consumers, and stakeholder groups.
- IPEN was given responsibility for promoting, supporting, and coordinating the participation of public interest NGOs for the International Lead Poisoning Prevention Week of Action sponsored by GAELP. Since its start in 2013, IPEN Participating Organizations in more than thirty countries released national reports, organized media events, and carried out other Week of Action activities with assistance from IPEN.

Heavy metals and SAICM implementation

The harms to human health and the environment from toxic metals have captured international attention. In 2002, the Johannesburg Plan of Implementation called for promoting, *"…reduction of risks posed by heavy metals."* IPEN's work on metals includes lead and mercury, among others. Work on lead is covered in the section on elimination of lead paint above and work on mercury is described below.

The SAICM Overarching Policy Strategy includes mercury in a group of chemicals for assessment due to concerns of *"…unreasonable and otherwise unmanageable risk to human health and the environment."* The SAICM Global Plan of Action includes activities directed at reducing harms posed by metals in items 57, 60, 156, 157, and 244. Finally, the Minamata Convention on Mercury was adopted and opened for signature at the Diplomatic Conference in October 2013.

The IPEN Mercury-Free Campaign has addressed the alarming level of human and environmental health threats posed by mercury around the world. Through the Campaign, IPEN aims to build a robust base of civil society and non-governmental organizations (NGOs) working to raise awareness about mercury threats and support the development and implementation of a strong global treaty to eliminate or significantly reduce these threats. Participating NGOs from all over the world work together to build NGO capacity; raise awareness about mercury exposure and safer alternatives (including alternatives to dental amalgam); monitor mercury-containing products and the availability of mercury-free alternatives; support activities that link to the international mercury discussions, and promote NGO engagement in the treaty negotiation and implementation process.

In 2013 IPEN and partner Biodiversity Research Institute released a report, *Global Mercury Hotspots*. The report revealed that mercury contamination regularly exceeds health advisory

levels in humans and fish worldwide and was the first of its kind to identify global biological mercury hotspots of particular concern to human populations and the ecosystems on which they depend. The report, which provided mercury monitoring information generated through sampling both fish/seafood and human hair, was updated in September, 2013 in preparation for the Mercury Treaty Diplomatic Conference held in Japan in October, 2013.

Just prior to the Diplomatic Conference, IPEN and partner Citizens Against Chemical Pollution (Japan), hosted an important International Toxics Metal Skillshare and Minamata Symposium in Minamata, Japan. The Skillshare included 42 participants from 26 countries, and the Symposium included those same participants as well as approximately 100 Japanese residents from Minamata and the surrounding area. The events were very successful in sharing information and experiences, and building new alliances. International participants were able to learn directly from the experiences of the Minamata community and share information about mercury use, research, and activities around the world.

In 2013, IPEN presented its newly adopted *Minamata Declaration on Toxic Metals* to the Minamata community at the conclusion of the Symposium. The Declaration outlines IPEN's commitment to work globally to counter pollution impacts on people and the environment from toxic metals such as lead, mercury and cadmium.[11]

In April 2014, IPEN updated its "*NGO Introduction to Mercury Pollution*" booklet and combined it with new text to release the "*NGO Introduction to Mercury Pollution and the Minamata Convention on Mercury.*" This informative guide is now available in all six UN languages.[12]

In its work to leverage the Mercury Treaty for on-the-ground change to reduce mercury pollution, IPEN launched its International Mercury Treaty Enabling Activities Program (IMEAP) in 2014.[13] The IMEAP program includes:

- Surveying ongoing and planned Treaty ratification and implementation activities by NGOs, Intergovernmental Organizations (IGOs) and other agencies, to identify potential strategic NGO Mercury Treaty enabling activities;
- Conducting Mercury Treaty enabling activities to promote Treaty ratification and implementation; and
- Communicating and assessing progress in implementation.

IPEN currently has 27 IMEAP projects in 29 countries with nine projects completed and most others nearing completion. The projects are aligned to key themes of the Mercury Treaty, including:

- Mercury country situation reports
- National public awareness activities
- Mercury hot spots and mercury waste (contaminated sites), including storage
- Mercury supply and trade

[11] http://ipen.org/documents/ipen-minamata-declaration-toxic-metals
[12] http://ipen.org/documents/ngo-introduction-mercury-pollution-and-minamata-convention-mercury
[13] http://ipen.org/documents/international-mercury-treaty-enabling-activities-program

- Industrial emissions and releases (unintentional sources)
- Large-scale mining emissions and releases (unintentional sources)
- Mercury in products (intentional sources)
- Mercury in ASGM (intentional sources)
- Industrial processes (intentional sources)

As more projects reach completion, key documents from each project will be uploaded to the IPEN website to provide a record of the activities as well as a resource for NGOs and researchers seeking to expand awareness of mercury pollution issues and replicate projects across regions to support the implementation of the Mercury Treaty. A key feature of most IMEAP projects is to create opportunities for engagement between NGOs and government authorities to jointly consider their national mercury pollution issues and develop inclusive, forward-looking processes and policies to address them.

China chemical safety

IPEN implemented the China Chemical Safety Project together with Arnika (Czech Republic) and Green Beagle (China) to strengthen the capacity of civil society organizations and communities impacted by pollution and increase chemical safety in China.[14] The Project was implemented from 2012 – 2014 and focused on these key objectives:

- Improving capacities of impacted communities and civil society organizations for involvement in policy making
- Training on public participation in Environmental Impact Assessment (EIA)
- Generating new publicly available data about pollution and impacted communities that contribute to increased implementation of local and national chemical safety policies
- Raising awareness on emissions-related pollution

Target project regions included communities impacted by pollution in Beijing, Guangdong, Guangxi, Hebei, Heilongjiang, Henan, Hubei, Hunan, Inner-Mongolia, Jiangxi, Shandong, Shanghai, Sichuan, and Zhejiang provinces.

The Project has played a role in training impacted communities on how to participate in Environmental Impact Assessment (EIA). Through multi-stakeholder trainings, impacted communities have been informed about what the company and relevant government departments should do to avoid unregulated emissions and releases and how to address infractions in the original commitments made in the approved EIA forms of the projects. The Project published a guidebook on this topic to assist communities, and individual consultations with pollution victims have helped to establish collaborative advocacy actions.

The Project carried out a series of 11 case studies on pollution from metals, wastes, and chemicals.[15] Many of these case studies featured new information on pollution at various sites.

[14] The Project was funded by the European Union with the formal name, Strengthening the capacity of pollution victims and civil society organizations to increase chemical safety in China
[15] http://ipen.org/projects/china-chemical-safety-project-2012-%E2%80%93-2014

The Project also provided use of a hand-held XRF device for characterizing metals contamination and a portable device for measuring PM2.5 pollution in seven communities. A study of dioxins and PCBs in free-range chicken eggs collected near polluting facilities showed elevated levels exceeding EU regulatory limits in all of them.[16] These included samples near waste incinerators in Wuhan, Likeng, and Shenzhen; a metallurgical plant in Beihai; a PCBs stockpile in Ziyang; and a PVC plant in Qihua. The study also found very high levels of brominated dioxins and furans in a sample near a waste incinerator in Wuhan – to our knowledge the first report of these substances measured in chicken eggs in China.

Public interest NGO actions on SAICM emerging policy issues and issues of concern

This section describes NGO activities from 2012 – 2015 on SAICM emerging policy issues of chemicals in products, hazardous substances within the life cycle of electrical and electronic products, nanotechnologies and manufactured nanomaterials, and endocrine disrupting chemicals. Please see the section above for work performed on the elimination of lead in paint.

Chemicals in products

Consumer awareness on chemicals in products is a strong driver for creating markets for cleaner products. However, IPEN's surveys and investigations (described below) have demonstrated that toxic chemicals are present in a large number of products in the market and they are often not adequately labeled or not labeled at all. Current efforts and capacities to provide information about chemicals of concern in products are inadequate; grey or informal markets pose huge challenges; and the no data - no market principle should be applied.

Paragraph 15b of the SAICM OPS states an important SAICM objective: *"To ensure for all stakeholders: That information on chemicals throughout their life cycle, including, where appropriate, chemicals in products, is available, accessible, user friendly, adequate and appropriate to the needs of all stakeholders. Appropriate types of information include their effects on human health and the environment, their intrinsic properties, their potential uses, their protective measures and regulation."* Delegates at ICCM2 decided to implement the Chemicals in Products Project to promote this objective. The decision at ICCM2 reflects consensus agreement to collect and review existing information on information systems pertaining to chemicals in products; assess that information in relation to the needs of all relevant stakeholders and identify gaps; and develop specific recommendations for actions to promote implementation of the Strategic Approach with regard to such information, incorporating identified priorities and access and delivery mechanisms.[17]

Since 2012, IPEN's Working Group on Chemical in Products (CiP WG) has been involved in providing comments to the draft Chemical in Products (CiP) Programme prepared by the United Nations Environment Programme (UNEP) and the Steering Group, which is comprised of health sector, industry, government and other representatives. As a Steering Group Member, IPEN

[16] http://ipen.org/sites/default/files/documents/POPs-in-chicken-eggs-from-hotspots-in-China-final_12_Aug_2015.pdf
[17] ICCM2 II/4C, SAICM/ICCM2.2/15, 2009

represents public interest NGOs and shares information about the progress of the CiP Programme development with the members of IPEN's CiP WG.

At the CiP meeting held in 2013 and afterwards at the second meeting of the SAICM's Open-Ended Working Group in 2014, during the conference calls with Steering Group members, and at the final CiP meeting in China in 2015, IPEN highlighted its major concerns over information disclosure on chemicals in products.

IPEN believes that the CiP Programme is based on the central principle that all stakeholders (those along the supply chain and those outside it) should have relevant and reliable information to make informed decisions about chemicals in products. This principle should not be undermined by enabling less disclosure and transparency, especially for chemicals that pose risks to human health and the environment.

IPEN's CiP WG insisted that the following key components should be addressed:

1) Health and safety information should not be regarded as confidential

The latest version of the CiP Programme that will be presented at the 4th International Conference on Chemicals Management (ICCM4) undermines this key chemical safety principle by confusing it with confidential business information (CBI). There is consensus agreement on the need for access to health and safety information in legally binding multi-lateral environmental agreements – and SAICM affirms it as well.

While stating that *"information needed to protect human health and the environment should not be regarded as confidential,"* the CiP Programme nevertheless notes the need to protect the precise identity of the chemical for the sake of CBI safety. The driver for safer chemistries comes from transparency. As written, it justifies CBI even for those chemicals that pose risks to human health and the environment. The CiP Programme should not be encouraging less disclosure and transparency.

Members of IPEN's CiP WG noted that corporate competitors can easily analyze products to reveal their chemical contents – thus insisting on CBI usually prevents consumers from getting the information, not corporate competitors. In addition, CBI claims may result in significant costs for businesses for not being transparent about the hazardous chemicals in their products.

The non-prescriptive character of the CiP Programme has been reiterated many times. The last version, however, proposes a very prescriptive approach to stakeholder responsibilities in protecting CBI. According to the CiP Programme, governments are responsible for CBI 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.

2) There should be a unified approach to substantive CiP information release in all countries

During the negotiations, IPEN's CiP WG members noted that the draft CiP Programme would create a patchwork of information release depending on the existence of national laws. This would simply encourage double standards with good information release in countries with strong laws and poor information release in developing countries with non-existent or inadequate regulations. These comments were acknowledged by UNEP and the Steering Group members, and the Programme guidance for stakeholders on exchanging chemicals in products information now states that *"the absence of, or conflicting regulations between countries create challenges selecting chemicals for inclusion in a CiP information system. Numerous chemicals may be restricted in some jurisdictions and either not regulated or regulated differently in others. It may be the case that legislation is not yet in place to effectively address chemicals in products issues."*

IPEN's CiP WG insisted on having a unified list of hazardous chemicals based on the most stringent regulatory list to be used in all countries with a possibility to go beyond regulatory requirements. Though this list was not included, the CiP Programme now states that *"stakeholders may use the SAICM criteria[18] to identify the chemicals that they choose to include in their information exchange systems/activities. These SAICM criteria, based on hazard and targeting risk reduction, provide an internationally-accepted basis for selection of chemicals under the CiP Programme."*

IPEN actively supported addition of a new *"Beyond Legally Restricted Substances List"* into the *"Guidance for Stakeholders on Exchange of Information on Chemicals in Products"* prepared to help stakeholders implement the CiP Programme. The Guidance now contains three parts on how to select chemicals for CiP information exchange, including part from the *"Legally Restricted Substances List,"* part from the *"Beyond Legally Restricted Substances List,"* and a part on selecting chemicals based on hazard characteristics.

IPEN believes that the CiP Programme should be an authentic process for moving forward on access to information. As there is no obligation for private sector stakeholders to participate, the CiP Programme should be ambitious enough to attract the most forward-looking private sector participants. IPEN remains committed to working with colleagues to make that happen.

Hazardous substances within the life cycle of electrical and electronic products

The global growth in electrical and electronic equipment production and consumption has been exponential in the last two decades, fuelled by rapid changes in equipment features and capabilities, product obsolescence, decrease in prices, and the growth in internet use. In May of this year, the Executive Director of the United Nations Environment Programme (UNEP) told journalists that the *"tsunami of e-waste rolling out over the world"* accounted not only for a large portion of the world's non-recyclable *"waste mountain,"* but also needed to be dealt with due to hazardous elements found in electronic equipment. The waste issue has provoked further

[18] SAICM Overarching Policy Strategy, Paragraph 14

concerns about harms to workers involved in production of electronic products and both life cycle steps point to the importance of green design as a key aspect of solving this problem.

Hazardous chemicals are used to manufacture electrical and electronic equipment and some of these remain in the articles where they pose further harm upon becoming wastes (e-wastes). These include several persistent, bioaccumulative and toxic substances (PBT), including heavy metals and brominated flame retardants. The situation is further complicated by convoluted supply chains and the lack of infrastructure for sound chemicals management in many developing and transition countries.

Overall, the chemical safety issues in electronics design and production have not been comprehensively addressed in the SAICM process. In 2011, 38 governments and stakeholders from the industry and public interest NGO sectors met to develop recommendations on the sector in a meeting convened by UNIDO and the Basel and Stockholm Convention Secretariats.[19] The group developed an extensive set of recommendations for addressing the full life cycle of electronics that have never been adequately acted upon. Key messages relevant to design and production include:

- Solutions are most efficiently and effectively accomplished upstream and addressing problems upstream can significantly and positively impact other parts of the life cycle.
- An increased pace to implement green design and the phase-out of hazardous substances contained in electrical and electronic products is required.
- The improvement of transparency with respect to information on hazardous substances used in electrical and electronic products for all stakeholders involved in the life cycle, including consumers, workers, and in communities around manufacturing and disposal sites, is necessary.
- It is important to equally protect consumer, worker and community health throughout the life cycle of electrical and electronic products.

At the ICCM3 in 2012, thirteen activities on electronics were added to the SAICM Global Plan of Action (GPA). These included items on compiling and creating lists of chemicals of concern; encouraging approaches to green design; adopting policy instruments that support hazardous chemical reduction, elimination and substitution; formulating, promoting and implementing health-based exposure limits for workers; and advancing policies such as extended producer responsibility and take back schemes.

All stakeholders including NGOs now have an opportunity to conduct official campaigns aimed at SAICM implementation using concrete GPA activities. ICCM3 also encouraged use of the recommendations from the International Workshop on Hazardous Substances within the Life Cycle of Electrical and Electronic Products that was held in Vienna, Austria in 2011, and to create an international set of best practice resources on all three stages of the life cycle; upstream (design), midstream (manufacturing) and downstream (waste).

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19 http://www.saicm.org/images/saicm_documents/iccm/ICCM3/Meeting%20documents/INF%20Documents/ICCM3_INF24_Report%20e-waste%20workshop.pdf

Since the ICCM3, IPEN Participating Organizations have undertaken various activities related to electrical and electronic products, such as the production of three reports by Toxics Link (India): *"Impact of E-Waste Recycling on Water and Soil," "Looking Through Glass: CRT Glass Recycling in India,"* and *"Time to Reboot,"* and the production of *"An efficient & effective e-waste collection system for Ethiopia"* (via the E-Waste Management Project in Ethiopia) and *"Solving the E-waste Problem"* Green Paper by Pesticide Action Nexus Ethiopia. With IPEN, Pesticide Action Nexus Ethiopia also launched a booklet: *"Guide for Conducting an E-waste Inventory in Africa"* at a standing-room only side event held at the 2013 Conferences of the Parties (COP) to the Basel, Rotterdam and Stockholm Conventions. The side event, *"Dumping E-Waste and Recycling POPs – Are the Conventions Losing Control?"* outlined the global policy landscape, highlighted key agenda issues at the Basel and Stockholm COPs, and provided insights via the work in Ethiopia.

In 2015, International Campaign for Responsible Technology (ICRT) organized *"A Challenge to the Global Electronics Industry to Adopt Safer and More Sustainable Products and Practices, and Eliminate Hazardous Chemicals, Exposures and Discharges."*[20] The Challenge seeks industry cooperation and action on: transparency on chemicals used and associated hazards, use of safer alternatives, worker protection, guaranteed participation of workers and community members in sound management of chemicals, protection of communities and the environment, and compensation and remediation for harm to people and the environment. More than 400 public interest NGOs from over 40 countries have endorsed *"The Challenge"* and representatives from our networks have presented it to hundreds of electronics industry representatives at meetings in Amsterdam, Guadalajara, and San Jose.

The next step was to create the implementation document *"Meeting the challenge"* which includes detailed guidance for how electronics companies can implement the recommendations in the Challenge.[21] This document was presented to the IndustriALL Global Union's World Conference on ICT, Electrical & Electronics in June 2015, in Petaling Jaya, Malaysia. More than 100 representatives from 16 countries endorsed the effort in the final resolution.

In Bangladesh, the Ministry of Environment and Department of Environment are the government entities involved in issues related to e-waste regulation. The Environment and Social Development Organization (ESDO) was invited by the Ministry as a technical expert group to take part in the process. In 2012-2013, ESDO submitted guidelines on e-waste management to the Prime Minister, Ministry of Law, Ministry of Environment and Forest, and Department of Environment. A government group, ICT division, in association with the Bangladesh Association of Software & Information Services, has organized workshops, seminars and conferences involving software companies, policy makers, NGOs, development agencies and students.

In India, Toxics Link and other NGOs are working closely with the Central Pollution Control Boards, State Pollution Control Boards and the other government agencies who are the major players in implementing e-waste rules.

[20] http://goodelectronics.org/news-en/growing-evidence-of-illnesses-and-cancer-among-electronics-workers/at_download/attachment

[21] http://goodelectronics.org/news-en/meeting-the-challenge-2013-detailed-recommendations-for-the-electronics-industry-regarding-the-use-of-chemicals

In Ethiopia, the Ministry of Environment and Forest and the Ministry of Communication and Information Technology, in collaboration with the United Nations Industrial Development Organization (UNIDO), has been implementing a Global Environment Facility-funded two-year project since 2013. This project is aimed at laying a foundation for the environmentally sound management of e-waste in Ethiopia and has strengthened the establishment of a computer refurbishment and dismantling facility that can be a model for other electrical and electronic items. This project also initiated the formulation of an e-waste management regulation that passed many steps and has been submitted to the Ethiopian Council of Ministers for a final discussion and ratification. This is an important initiative that encourages voluntary action by governments to consider product stewardship and EPR aspects and needs to be supported by the Basel Convention so that local problems can be handled locally and external burdens can be minimized.

Public awareness about the dangers of e-waste has been growing in some countries in recent years, due largely to awareness-raising activities by NGOs. In Bangladesh, ESDO is working on information dissemination and promotional activities to reach the public, such as a documentary on the quantity of e-waste generation in Bangladesh, poor management and the adverse health and environmental impacts. The documentary was broadcast on national TV channels. ESDO has also participated in several talk shows on e-waste, and has arranged many workshops, seminars, and school awareness-raising and educational programs.

Unfortunately, despite increasing awareness, e-waste issues are not getting better in some countries. In Bangladesh, NGOs report no significant improvement on e-waste issues since September 2012. The guidelines on e-waste management were submitted several times to governmental bodies but no action has yet been taken. Due to an inactive authority, a huge amount of e-waste is coming into the country and is dumped in open spaces without any regulation, which is making the situation worse day by day. In India, NGOs report a slow and steady improvement of the overall e-waste scenario, pointing to the more than 100 authorized e-waste recyclers that have been set up and some collection mechanisms that are in place. However, considering the quantity of waste that is being generated in India, it is felt that many more actions need to be undertaken for a comprehensive solution.

Nanotechnologies and manufactured nanomaterials

The 2nd International Conference on Chemicals Management (ICCM2) decided to nominate nanotechnologies and nanomaterials as an emerging policy issue in 2009. That initiative was followed up by another resolution at the 3nd International Conference on Chemicals Management (ICCM3), and with the addition of specific nano activities in the SAICM Global Plan of Action (GPA).

The SAICM decision and further resolutions request that governments and industry promote actions to safeguard human health and the environment (including, for example, through engagement with workers and their representatives), agrees that more research and better understanding of the potential risks to human health and the environment needs to be undertaken, and encourages wider dissemination of human health and environmental safety information in relation to products containing nanomaterials.

In response to attention to the issue by public interest NGOs, IPEN created a dedicated Nano Working Group of civil society organizations (CSOs) from five continents in 2009. The IPEN Nano Working Group has worked to support the ICCM decisions by helping to raise awareness and build capacity among CSOs, as a first necessary step to ensure the safe production, use, and disposal of nanomaterials.

IPEN participated actively in nano-related regional workshops organized by the United Nations Institute for Training and Research (UNITAR) in Zambia and Uruguay. Additionally, prior to each SAICM regional meeting, the IPEN Nano Working Group organized separate awareness-raising meetings for CSOs to maximize active participation from NGOs in the region. IPEN also worked with all regional stakeholders (from government, intergovernmental organizations, industry, and civil society) to produce concrete and constructive outcomes from these meetings.

IPEN actively supported the drafting of the report that was prepared by the SAICM Secretariat on nanotechnologies and manufactured nanomaterials by providing contents and bibliographical elements to the consultant in charge of the report drafting. IPEN has also engaged a number of researchers from Latin America and the Caribbean (GRULAC), Africa, and the Asia Pacific regions in these SAICM discussions and projects.

To promote public awareness-raising on the issue, IPEN collaborated with the Latin American Nanotechnology and Society Network (ReLANS) in the production and dissemination of regional booklets. In 2014, IPEN added a new booklet focusing on the Asia Pacific region to the ones already published on the African and GRULAC regions. The booklet *"Social and Environmental Implications of Nanotechnology Development in Asia Pacific"* was distributed and presented at a side event during the SAICM regional meeting in Kuala Lumpur in March 2014. Members of the IPEN Working Group also published a larger study entitled "*Managing the Unseen: Opportunities and challenges with nanotechnologies"* and collaborated on a book on *Nanotechnologia en America Latina: Trabajo y regulacion.*

In addition to producing awareness-raising and capacity-building materials, and actively participating in all nano-related events organized under the SAICM umbrella, IPEN also organized its own webinars in collaboration with the Pwani University in Kenya, targeting students, researchers and civil society representatives, and provided a civil society perspective to the work of the Organisation for Economic Co-operation and Development's Working Party on Manufactured Nanomaterials.

Finally, the IPEN Working Group reached out to a number of governments involved in developing national approaches (regulatory or quasi-regulatory) to nanotechnology development, and contributed to their design and adoption, including in Brazil, France, Belgium and Denmark.

Endocrine disrupting chemicals (EDCs)

Over the past decades, research on the impacts of EDCs exposure has identified a range of effects on growth, development, and reproduction, including decreased fertility in humans, hormonally-related cancers, metabolic disorders that relate to behavioral changes, obesity, diabetes, and suppression of the immune system, as well as adverse effects on wildlife. Although

work in the field has progressed, there is still a lack of knowledge about the identity of EDCs and their impact on human health and environment. TEDX, the Endocrine Disruption Exchange, lists around 1000 EDCs and potential EDCs along with their uses. Because of the endocrine system's critical role in so many important biological and physiological functions, impairments in any part of the endocrine system can lead to disease or even death. By interfering with the body's endocrine systems, EDC exposure can therefore perturb many functions.

A recent report[22] by the Nordic Council of Ministers focuses on the financial costs of effects of EDCs on male reproductive health. The analysis shows that annual costs owed to EDCs exposure may amount to €3.6, €36.1 or €72.3 million in the Nordic countries and €59, €592 or €1,184 million at the European level. Another study of cost impacts of EDCs examined male reproductive dysfunction, birth defects, obesity, diabetes, cardiovascular disease, and neurobehavioral and learning disorders and conservatively estimated annual costs of €157 billion in the EU – 1.23% of the gross domestic product.[23]

IPEN´s work on EDCs overlaps with many other important topics of chemical safety such as pesticides, heavy metals and chemicals in products, as many chemicals are also EDCs and can be found in a broad variety of products.

In 2012, the 3rd International Conference on Chemicals Management (ICCM3) decided to make EDCs an emerging policy issue and recognized *"…potential adverse effects of endocrine disruptors on human health and the environment"* and *"…the need to protect humans, and ecosystems and their constituent parts that are especially vulnerable."* The global community recommended activities to undertake, including:

- providing up-to-date information and scientific expert advice to relevant stakeholders for the purpose of identifying or recommending potential measures that could contribute to reductions in exposures to or the effects of endocrine disrupting chemicals, in particular among vulnerable populations;
- raising awareness at all levels;
- providing international support for activities to build capacities in countries, in particular developing countries and countries with economies in transition, for generating information and for assessing issues related to endocrine disrupting chemicals in order to support decision-making, including the prioritization of actions to reduce risks; and
- developing case studies and advice on translation of research results into control actions.

Prior to SAICM regional meetings in 2013 and 2014, IPEN, in collaboration with Pesticide Action Network (PAN), submitted a "thought starter" document on endocrine disrupting pesticides and SAICM. IPEN also submitted a draft resolution on EDCs. Subsequently, the SAICM regional meetings in Latin America (GRULAC), Asia, and Africa passed resolutions on EDCs that call for robust awareness-raising activities and invited the United Nations Environment Programme (UNEP) and World Health Organization (WHO) to develop a report targeted to developing and transition countries. The resolutions address the topics of vulnerable

[22] http://dx.doi.org/10.6027/TN2014-557

[23] Trasande L, Zoeller RT, Hass U, Kortenkamp A, Grandjean P, Myers JP, DiGangi J, Bellanger M, Hauser R, Legler J, Skakkebaek NE, Heindel JJ (2015) Estimating Burden and Disease Costs of Exposure to Endocrine-Disrupting Chemicals in the European Union, J Clin Endocrinol Metab 100: 1245 – 1255 doi: 10.1210/jc.2014-4324

groups, EDCs in pesticides, identification of priority EDCs, EDCs in products (such as children's products, building products, and electrical and electronic products), capacity needs of stakeholders, human biomonitoring, safer alternatives, and cost of inaction. They recommend organizing a series of awareness-raising and capacity-building activities. Collectively over 140 governments endorsed the three resolutions.

In 2013 IPEN established an international NGO Working Group to facilitate and coordinate national, regional, and international NGO EDCs activities and to encourage NGOs in as many countries as possible to take up the issue. Some participants of the IPEN EDCs Working Group also participate in the EDC-Free campaign, which was set up by NGOs in 2013 for partners working on EU and national policy in Europe. And many IPEN Participating Organizations and partners, such as Women in Europe for a Common Future, have been working on EDCs issues for years through campaigns such as *"Nesting: Avoid hazardous substances, protect children,"* which aims to inform parents and the health sector about concrete measures to prevent exposure to harmful chemicals in the indoor environment.

IPEN colleagues in Russia gathered relevant case studies and published, *"Endocrine Disrupting Chemicals: State of the Problem and Steps Forward."*[24] The Guide is designed to raise awareness in Russian-speaking countries and highlights some of the first testing results on EDCs in consumer products in the Eastern Europe, Caucasus, and Central Asia region.

In 2014, at the 2nd Open-Ended Working Group (OEWG2) meeting, UNEP formed a multi-stakeholder EDCs Advisory Group. IPEN is actively participating in this Group.

In December 2014, the Endocrine Society and IPEN jointly released an EDCs guide, which brings together the latest scientific information on EDCs in a readable format for policy makers and NGOs in developing and transition countries. The EDCs Guide is entitled *"An Introduction to Endocrine Disrupting Chemicals (EDCs)"* and has already been hailed by government representatives and NGOs as a clear and comprehensive educational tool on EDCs.[25] IPEN is continuing to work with the Endocrine Society to raise awareness about EDCs in developing countries and countries with economies in transition and to educate IPEN Participating Organizations on health and environmental issues associated with EDCs.

Highly hazardous pesticides

Since the 3rd International Conference on Chemicals Management (ICCM3) in Nairobi in 2012, IPEN and Pesticide Action Network (PAN) and their partner organizations have been working to elevate the problem of highly hazardous pesticides (HHPs) within the SAICM process, as well as within countries and communities. This has included preparing Information Documents on HHPs for the SAICM regional meetings in 2013 and 2014, and proposing resolutions at the meetings to advance work on phasing-out HHPs. In two regions, Latin America and the Caribbean and Africa, organizations were actively involved in the survey of HHPs that was mandated by these meetings.

[24] http://ipen.org/documents/endocrine-disrupting-chemicals-state-problem-and-steps-forward
[25] http://ipen.org/documents/introduction-endocrine-disrupting-chemicals-edcs

At the 2nd Open-Ended Working Group (OEWG2) in December 2014, IPEN and PAN again provided Information Documents, and also organized a side event, jointly with the Food and Agriculture Organization (FAO), on HHPs. In addition, both organizations provided considerable materials at information booths on HHPs and their alternatives.

PAN and IPEN worked with the FAO and countries to develop proposals for a platform for action on HHPs under SAICM, and strongly supported the Global Alliance for the Phase-out HHPs that was proposed by the African region at the OEWG2.

IPEN, PAN and their partner organizations continue to work closely with communities, governments, regional bodies and the international community to move forward progress on the phasing-out of HHPs and their replacement with safer alternatives, particularly agroecology and other nonchemical methods of pest, weed and disease management.

Public interest NGOs and SAICM implementation in eight IPEN regions

Anglophone Africa

IPEN Participating Organizations in the Anglophone Africa have continued to contribute to SAICM implementation in their respective countries after ICCM3 held in Nairobi, Kenya from 17-21 September 2012. Activities related to mercury and lead seem to be increasing following the adoption of the Minamata Convention on Mercury in October 2013 and initiation of the International Lead Poisoning Prevention Week in the same month. Most activities focus on mercury in artisanal and small scale gold mining (ASGM), mercury in products and in healthcare (such as dental amalgam). Activities related to lead are mostly in lead paint and used lead acid battery (ULAB) recycling.

Coordination of chemicals management is still inadequately addressed in a number of countries, with few stakeholders involved in chemicals management in some countries. There have been reviews of National Implementation Plans (NIPs) for the Stockholm Convention on POPs where NGOs are involved in different countries at different levels and roles. NGOs are also involved, though in a limited level, on the preparation of countries towards ratification of the Minamata Convention, including preparation of the National Action Plans (NAPs). However, in some countries, two years after its adoption, the process has not yet started, and, up to the end of June 2015, only six African countries have ratified the Convention out of 12 countries that have signed. They are Djibouti, Gabon, Guinea, Lesotho, Madagascar and Seychelles. This calls for more advocacy work from NGOs towards early ratification and implementation of the Convention.

NGO work progress from 2012 (ICCM3) to date

Ethiopia

In Ethiopia, SAICM implementation is lead by the Ministry of Environment and Forest (used to be called the Environmental Protection Authority – EPA). The Ministry invites NGOs to the discussion forums and seeks inputs of NGOs in the SAICM implementation process.

Pesticide Action Nexus (PAN) –Ethiopia, as reported in IPEN's Citizens' Report 2009 – 2012, began a project on environmentally sound management of electrical and electronic waste (e-waste) in Ethiopia in 2011, which included conducting an inventory in four major cities of Ethiopia. This was extrapolated for a national overview and used to secure Global Environment Facility (GEF) funding by the Ethiopian government. Since then, the project resulted in the development of a *Guide for Conducting E-waste Inventory in Africa*, which can be used by developing countries. An e-waste management regulation has also been drafted in Ethiopia, and will be presented to the policy makers by the end of 2015.

Additionally, the Ministry of Agriculture of Ethiopia has been granted Quick Start Programme (QSP) funding to develop bio-pesticides as an alternative to pesticides in the Ethiopian agriculture. The Ministry has involved PAN-Ethiopia in the process of consultative meetings.

Furthermore, PAN Ethiopia has implemented projects on pesticides, heavy metals (mercury and lead), and chemicals in products. These include projects on mitigating pesticide impacts through agro-ecological solutions.

Institute for Sustainable Development (ISD), in the same period, implemented a number of projects, including promoting indigenous knowledge on bio-pesticides and reducing or eliminating the use of agro-chemical pesticides for ecological organic agricultural production in the country.

Ghana

In Ghana, NGOs implemented projects and received government support in different ways. *Ecological Restorations*, for example, implemented projects called *"National Public Education and Awareness Creation on the Minamata Convention"* and *"Report on the Education on the Impact of Mercury Use in Dental Amalgam,"* which were advocating for the mainstreaming of national policies on mercury and finding suitable ways of addressing the issue of mercury pollution in Ghana. The NGO collaborated with the Ministry of Environment, Science, Technology and Innovations, (MESTI), the Environmental Protection Agency (EPA), the Ghana Chamber of Mines, the Ministry of Health, and an NGO coalition on artisanal mining during the implementation. Despite collaboration of stakeholders, there is no specific committee working on SAICM in Ghana.

Another NGO, *KASA,*[26] conducted a study called *"Human Health Risk Assessment and Epidemiological Studies from Exposure to Toxic Chemicals in selected Mining Areas"* in Ghana in collaboration with different stakeholders.

[26] KASA is an abbreviation of a local word simply means *speak* or *talk*

Kenya
In Kenya, *Centre for Environment Justice and Development (CEJAD)* implemented a project called *"Rapid assessment of the use of highly hazardous pesticides in the flower farms in Naivasha Kenya"* in 2013. The project established a community monitoring team comprised of local public health workers, flower farm workers representatives, fishermen, women, youth and community-based environmental groups, and developed tools and systems for monitoring the use and effects of highly hazardous pesticides to human health and environment. Based on the positive projects results, CEJAD was identified by the government's Ministry of Health of Naivasha sub-county health committee as a partner and CSO stakeholder to address the challenge of pesticides use in flower farms. NGOs are also participating in chemical management committees and events at the central government level.

Eco-Ethics Kenya conducted a workshop on *"Nanotechnology and nano-products: A panacea or an environmental hazard."* The organization also conducted consultations with hotels, tourist facilities and government agencies on use of chemicals and pesticides within tourism-related facilities to protect human health and the environment from these chemicals.

iLima Organization conducted analysis and awareness-raising campaigns on mercury hotspots and effects of hazardous chemicals in consumer products, including chemicals used in skin lightening products.

Mauritius
NGOs' interventions in Mauritius on the use of dental amalgam (which contains 50% mercury) have resulted in the government decision to stop its use in the teeth of pregnant women and young children. This decision was taken in late 2013. In addition, *Pesticide Action Network-Mauritius (PANeM)* and the Ministry of Environment have agreed to work together on the recommendations of the phasing-out of products containing mercury and address gaps in the local legislation on mercury and mercury-containing products. PANeM has also been working with farmers and agricultural workers towards awareness on the harmful effects of hazardous pesticides and how to reduce their dependency. SAICM is coordinated by the Ministry of Health, although there is no specific national committee to oversee its implementation.

Nigeria
In Nigeria, NGOs are part of the Basel, Rotterdam and Stockholm Convention Committees. There is no specific national committee on SAICM. The NGOs have implemented a number of projects with collaboration and support of different levels from the state or federal governments. For example, *Sustainable Research and Action for Environmental Development (SRADev Nigeria)* has implemented a number of projects on mercury (artisanal small-scale gold mining (ASGM), dental amalgam) and lead paint.

Rwanda
Rwandese Association of Ecologist (ARECO-Rwanda) and *Association ISUKU* are participating in the POPs national implementation plan (NIP), and are members of the National POPs Steering Committee. The organizations are also participating in the development, implementation and monitoring of a project on elimination of PCBs funded by the United Nations Environment

Programme (UNEP) and coordinated by Rwanda Environment Management Authority (REMA). There is no specific committee working on SAICM.

South Africa

groundWork is a Steering Committee member of the South African National Committee on Chemicals Management and Multi-stakeholder Committee on Chemicals Management (N/MCCM). The country has no national specific SAICM coordination committee; even other conventions are implemented piece meal. The N/MCCM Committee seeks to facilitate a cooperative approach for the implementation of safe management of hazardous chemicals with a view to promoting sustainable development and covering chemicals at all stages of their life cycles by various departments, as mandated by their respective legislations. It deals with relevant national legislation and regional and international obligations, including SAICM. The NGO has worked with the government (in the framework of the N/MCCM) to develop a stand-alone National Chemicals Management Bill, which will become an all-encompassing Chemicals Act. groundWork systematically submits inputs on the MCCM minutes, chemical awareness-raising action plan and the yearly work programme.

South Durban Community Environmental Alliance (SDCEA) has been involved in discussions with waste contractors in regards to transportation of chemicals as well as dumping of chemicals. It participates in monitoring committees of the waste companies in Durban, South Africa. The NGO managed through its campaigns to close down four hazardous chemicals dump sites situated in communities.

Tanzania

AGENDA for Environment and Responsible Development (AGENDA) implemented a project called *"Phase down of dental amalgam,"* which engaged different stakeholders in consultation and developed strategies to support reduction and eventually elimination of dental amalgam from dental service. The project raised public awareness on the negative effects of dental amalgam to humans and the environment, availability of mercury-free dental filling materials in the country, and the need to review the teaching curriculum of the dentists. It involved the Vice President's Office (Division of Environment), Ministry of Health and Social Welfare, Muhimbili University of Health and Allied Sciences (MUHAS), Tanzania Dental Association (TDA), NGOs, and media, among others. The Ministry of Health has supported[27] the project towards phase-out of dental amalgam. The project has become a vehicle for AGENDA to participate in other forum such as Annual Meetings of the TDA and the East Africa Dental Amalgam Phase-Down Project funded by UNEP.

Additionally, from 2009 – 2012 AGENDA coordinated a 3-countries QSP-funded project, *"SAICM Implementation in East Africa: Law Reform and Capacity Building for Sound Chemicals Management in Uganda, Tanzania and Kenya."* Among the activities of the project was to establish national and regional SAICM stakeholders networks. The established East Africa SAICM Stakeholders Network includes an e-mail listserve for information sharing for more than 300 stakeholders from governments, private sector, CSOs and individuals, and since 2012 has continued to be maintained as an important information exchange forum.

[27] http://www.ippmedia.com/frontend/index.php?l=79710

AGENDA has also been participating in the NIP review, including via a POPs inventory survey, leading the u-POPs team, and acting as a team member in the Institutional and Legal Framework review team.

Environment, Human Rights Care and Gender Organization (Envirocare) is implementing a 3-year project with the aim of reducing the impacts of toxic chemicals in products, specifically in cosmetics. The project has successfully created awareness for the public on the effects of toxic cosmetics to human health. As a result of Envirocare's work, a number of people - mostly women - have reduced the use of banned cosmetics and most of them have opted to go for safe cosmetics. Envirocare received recognition of its efforts when it was acknowledged by the Ministry of Health and Social Welfare during a Parliament Session in 2015. Discussion of policy review is currently ongoing.

The NGO *Environmental, Water, Health, Sanitation and Safety Ardent (EWa-SHESA)* conducted a study to assess the kind and amount of wastes being dumped along Mlalakuwa and Mbezi rivers. They are assessing how urban agriculture is practiced along the rivers, the levels of environmental pollution and health effects.

Irrigation Training and Economic Empowerment Organization (IRTECO) has conducted promotion and trainings on Integrated Pest Management (IPM) and ecological agricultural practices, including bio-chemical alternatives, to farmers' groups.

Tanzania Association of Public, Occupational and Environmental Health Experts (TAPOHE) promoted Integrated Pest and Vector Management (IVM) in communities and schools, training communities in self-surveillance and reporting of pesticide poisoning incidences in some selected areas in Tanzania.

Generally, chemicals management in Tanzania is slightly improving with contributions from different players, including the CSOs mentioned above (among others). However, there are still challenges, including inadequate coordination of chemicals management frameworks, lack of sufficient human and financial resources, and enforcement of the existing policy and legal frameworks.

Uganda

Participation of different stakeholders in Uganda has somehow improved and there has been overall general improvement in the awareness about chemicals management. Since 2014, the National Environment Management Authority (NEMA) has been revising some environment management frameworks. NGOs are part of the government implementation committee and other processes, including the review of the National Environment Management Policy (NEMP) and the National Environment Act (NEA), where a chapter on chemicals management has been included in the draft. In addition, NEMA is now revising the POPs NIP, which is about to be completed. NGOs *Probiodiversity Conservationists in Uganda* (PROBICOU), *National Association of Professional Environmentalists* (NAPE) and *Uganda Network on Toxic Free Malaria Control* (UNETMAC)) are members of the Steering Committee on POPs and NIPs review.

NAPE has been doing awareness-raising work and research on chemicals in consumer products and has put in place a network of NGOs promoting the sound management of chemicals - the Network on Sound Management of Chemicals – Uganda (NESMAC-U) to enhance the implementation of the SAICM. NAPE has also established a community radio in the district of Hoima; the Community Green Radio (www.greenradio.ug) operates to enhance community awareness on the sound management of chemicals.

PROBICOU has been promoting chemical safety for women and children in rural agricultural communities in Eastern Uganda, public awareness-raising on POPs and mercury (particularly public awareness on dental amalgam phase-down in Uganda), mercury use in ASGM, and training on general chemicals management to different stakeholders.

UNETMAC carried out advocacy towards reducing and ultimately eliminating the use of DDT for malaria vector control, and reaching the Millennium Development Goal of halting and beginning to reverse the incidence of malaria. The organization calls for an urgent and continued need to control malaria and replace DDT through safe, effective and affordable alternatives, in addition to supporting a sustainable transition from DDT and enhancing the range of options for vector control available. UNETMAC also carried out an advocacy campaign on the elimination of lead in paint, among other activities.

Despite the efforts being made by the government and CSOs, chemical safety in Uganda is still wanting. Public awareness on chemical safety issues is still very low and there is limited technical capacity in handling chemical-related incidences both within the government departments and CSOs.

Challenges and gaps

Despite improvement in SAICM implementation and contributions from different stakeholders since the ICCM3, still there are gaps to be addressed, and most identified in 2012 still exist in most of the countries. The major gaps that hinder SAICM implementation are inadequate human and financial resources and lack of technical capacity to address other chemical management challenges in their entirety. Other challenges and gaps encompass the following:

1. Inadequate accessibility to information – chemical information is still at the policy framing level at the national level, and has yet to trickle down to the local and community level. This results in poor public participation in the processes.
2. Uncoordinated management framework; i.e., no clear roadmap on national priority issues for SAICM implementation. Also, there is a lack of or non-functioning National SAICM Steering Committees in most of the countries in the region.
3. Lack of defined SAICM implementation structures and processes leading to conflicting mandates.
4. Lack of dedicated project/programme funding mechanisms.
5. Lack of national databases of implemented projects and activities for consolidation, resulting in overlapping implementation and support to national projects and programmes.
6. Inadequate institutional, policy and legal frameworks in a number of countries. In addition, there is generally poor enforcement of the existing chemicals management frameworks.

7. Occupational health risks caused by poor protection of workers from chemicals in the work place.
8. Placing SAICM coordination roles on existing officers of respective ministries led to low attention to SAICM - normally they address their primary roles and take SAICM as additional roles.
9. Low visibility about SAICM to the public despite a number of implemented and ongoing programs and projects.
10. Inadequate or non-compliance to the globally harmonized system (GHS) in labeling of chemicals.
11. Inadequate records on chemical accidents as well as monitoring and tracking of chemicals registered and used in the countries.
12. Inadequate laboratory capacity – infrastructure and personnel.

Conclusion

Although there has been improvement of NGO participation and contribution to SAICM implementation in the countries, through NGOs' own implemented projects or involvement in the national activities, there are as many challenges and gaps to fill if the region is to achieve the 2020 goal. The major challenge is funding to implement activities. Also, there has been a major shift of NGO activities from pesticides to heavy metals. This is an indication of funding availability. Therefore there is a need to continue fundraising from different sources to continue with activities on pesticides, including highly hazardous pesticides (HHPs), as it is still one of the main sources of chemical exposure through crop residues or air (spraying) and water. Pesticide management is still a priority for many NGOs in various countries in the region. Having less than five years for implementation, the 2020 goal is still far from reach. The countries need to address challenges linked to lack of resources, capacity, and infrastructural (legal and institutional) framework to implement SAICM. Multi-stakeholder collaboration, cooperation and coordination need to be harmonized and improved.

SAICM Objective	NGO Activity and Results	Names of NGOs	Country
Risk Reduction	Environmentally sound management of e-waste in Ethiopia GPA items: 1, 13, 15, 43,57	Pesticide Action Nexus (PAN) Ethiopia	Ethiopia
	Involved in the process of consultative meetings by the Ministry of Agriculture of Ethiopia in the development of bio-pesticides as an alternative to pesticides in Ethiopian agriculture GPA items: 31, 32, 51, 52	Pesticide Action Nexus (PAN) Ethiopia	Ethiopia

Report: New Decorative Enamel Paints in Nine Countries GPA items: 7, 9, 57, 63	Pesticide Action Nexus (PAN) Ethiopia	Ethiopia
African Lead Paint Elimination project - The project focuses on elimination of lead from enamel household paints with the aim to protect children's health GPA items: 1, 7, 9, 45, 57	Pesticide Action Nexus (PAN) Ethiopia	Ethiopia
Lead recycling Africa project GPA items: 1, 7, 9, 17, 112	Pesticide Action Nexus (PAN) Ethiopia	Ethiopia
Human breast milk sampling as part of the Stockholm Convention Report; in collaboration with Environmental Protection Agency, Ministry of Health, and World Health Organization GPA items: 54, 56, 64, 76, 112	Pesticide Action Nexus (PAN) Ethiopia	Ethiopia
Reduction of highly hazardous pesticide formulations through Integrated Pest Management approach GPA items: 23,27, 29,51, 114,116	Pesticide Action Nexus (PAN) Ethiopia	Ethiopia
Advocacy and awareness-raising towards toxic-free malaria control without DDT GPA items: 1, 27, 29, 54, 82	Pesticide Action Nexus (PAN) Ethiopia	Ethiopia
Reducing or eliminating the use of agro-chemical pesticides for ecological organic agricultural production in Ethiopia GPA items: 23,27, 29,51, 114,116	Institute for Sustainable Development (ISD)	Ethiopia

National public education and awareness creation on the Minamata Convention in collaboration with the Ministry of Environment, Science, Technology and Innovations, the Environmental Protection Agency, Ghana Chamber of Mines, Ministry of Health, and NGO coalition on artisanal mining GPA items: 9, 54, 56, 57	Ecological Restorations	Ghana
Education on the impact of mercury use in dental amalgam GPA items: 17, 57, 163, 195	Ecological Restorations	Ghana
Report: New Decorative Enamel Paints in Nine Countries; results used to promote the establishment of an appropriate legal and regulatory framework to control the manufacture, import, export, sale and use of lead paints and products coated with lead paints. GPA items: 7, 9, 57, 63	Ecological Restorations	Ghana
Study on the Human Health Risk Assessment and Epidemiological Studies from Exposure to Toxic Chemicals in Selected Mining Areas in Ghana GPA items: 57, 64	KASA	Ghana
Community monitoring of Highly Hazardous Pesticides' (HHPs) effects to human health and environment in Naivasha, Kenya GPA items: 23, 24, 27, 29	Centre for Environment Justice and Development (CEJAD)	Kenya
Inventory and mapping of mercury use in artisanal small scale gold mining (ASGM) sites in Migori South Western, Kenya GPA items: 45, 57	Centre for Environment Justice and Development (CEJAD)	Kenya

	Promoting dental amalgam phase down and shift to alternatives in Kenya GPA items: 17, 57, 163, 195	Centre for Environment Justice and Development (CEJAD)	Kenya
	Advocacy and awareness-raising towards toxic-free malaria control without DDT GPA items: 1, 27, 29, 54, 82	Centre for Environment Justice and Development (CEJAD)	Kenya
	Analysis of hydroquinone in skin lightening products in Africa and awareness-raising on the effects of hazardous chemicals in products to human health and the environment GPA items: 54, 56, 64, 76, 112	iLima Organization	Kenya
	Awareness-raising on human exposure and monitoring of mercury emissions from hotspots using Lumex mercury monitoring as well as analysis of mercury content in skin lightening products in Africa GPA items: 1, 17, 45, 54, 57	iLima Organization	Kenya
	Global Green and Healthy Hospitals (GGHH) campaign GPA items: 54, 57, 195, 196	groundWork	South Africa
	Advocacy on phasing-out dental amalgam in dental services in Tanzania GPA item: 17, 57, 163, 195	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
	African Lead Paint Elimination project - The project focuses on elimination of lead from enamel household paints with the aim to protect children's health' GPA items: 1, 7, 9, 45, 57	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
	Reducing mercury exposures and transitioning artisanal and small scale gold miners away from mercury use GPA items: 1, 17, 45, 54, 57	Agenda for Environment and Responsible Development (AGENDA)	Tanzania

Lead recycling Africa project GPA items: 1, 7, 9, 17, 112	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
Participating in the POPs NIP review process GPA items: 74, 76, 77, 78	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
Participating in the project *"Reducing U-POPs and Mercury Releases from the Health Sector in Africa"* – a full size GEF funded project, implemented by UNDP in partnership with WHO and Health Care Without Harm and the Ministry of Health and Social Welfare in four Sub-Saharan African countries (Ghana, Madagascar, Tanzania and Zambia) GPA items: 43, 44, 45, 74, 77	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
Participating in the project 'Promotion of BATs and BEPs to Reduce U-POPs Releases from Waste Open Burning in the Participating African Countries of SADC Sub-region' coordinated by the Vice President's Office, Division of Environment GPA items: 43, 44, 45, 74, 77	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
Reduce the impact of toxic chemicals in products to human health and the environment in Tanzania GPA items: 54, 56, 64, 76, 112	Environment, Human Rights Care and Gender Organization (ENVIROCARE)	Tanzania
Promoting cleaner production in textile industries in Tanzania GPA items: 43, 45, 70, 73	Environment, Human Rights Care and Gender Organization (ENVIROCARE)	Tanzania

	Working with artisanal gold miners in Mubende district to minimize risks of mercury contamination/poisoning GPA items: 1, 17, 45, 54, 57	National Association of Professional Environmentalists (NAPE)	Uganda
	Identifying harmful consumer products and carrying out advocacy activities GPA items: 54, 57, 76, 78	National Association of Professional Environmentalists (NAPE)	Uganda
	Promoting the chemical safety of children at work in rural agricultural communities GPA items: 74, 76, 77, 78	Probiodiversity Conservationists in Uganda (PROBICOU)	Uganda
	Advocacy towards reducing and ultimately eliminating the use of DDT for malaria vector control, and reaching the Millennium Development Goal of halting and beginning to reverse the incidence of malaria.	Uganda Network on Toxic Free Malaria Control (UNETMAC)	Uganda
	Campaign against manufacturing, selling and use of lead paints in Uganda GPA items: 1, 7, 9, 45, 57	Uganda Network on Toxic Free Malaria Control (UNETMAC)	Uganda
	Collected, prepared and tested 100 white paint samples from eight brands from the Ugandan market in Kampala for lead content GPA items: 1, 7, 9, 45, 57	Uganda Network on Toxic Free Malaria Control (UNETMAC)	Uganda
	Promotion of organic farming in Uganda GPA items: 23,27, 51, 114,116	Uganda Network on Toxic Free Malaria Control (UNETMAC)	Uganda
Knowledge and Information	Coordinating the IPEN international e-waste Working Group and published an e-waste inventory guide GPA items: 23,27, 29,51, 114,116,	Pesticide Action Nexus (PAN) Ethiopia	Ethiopia

	2013 International Lead Poisoning Prevention Week of Action activities GPA items: 1, 7, 9, 112,163	Pesticide Action Nexus (PAN) Ethiopia	Ethiopia
	Initiating the establishment of pesticide poisoning reporting chain to the Rotterdam Secretariat GPA items: 23, 32,	Pesticide Action Nexus (PAN) Ethiopia	Ethiopia
	Promoting indigenous knowledge on bio-pesticides GPA items: 23,27, 29,51, 114,116	Institute for Sustainable Development (ISD)	Ethiopia
	Review of policies on mercury, Awareness creation on the effects of mercury on human health, Information generation GPA items: 9, 54, 56, 57	Ecological Restorations	Ghana
	2013 International Lead Poisoning Prevention Week of Action activities GPA items: 1, 7, 9, 112,163,164	Ecological Restorations	Ghana
	Conducted research and educational programs and provided information to communities, companies and government on the Minamata Convention GPA items: 80, 82, 85	KASA	Ghana
	Stimulating effective alliances and networking for artisanal and small scale miners (ASM) in East Africa GPA items: 45, 57	Centre for Environment Justice and Development (CEJAD)	Kenya
	Conducted a workshop on: Nanotechnology and nano-products: A panacea or an environmental hazard GPA items: 2, 3, 4, 43, 44 Nano appendix to Annex B activities 4,5, 9	Eco-Ethics	Kenya

	Conducted consultations with numerous hotels, tourist facilities and government agencies on use of chemicals and pesticides within tourism related facilities GPA items: 23, 24, 70	Eco-Ethics	Kenya
	Awareness-raising and education on effects of hazardous consumer products to human health and the environment GPA items: 54, 56, 64, 76, 112	iLima Organization	Kenya
	Phasing-out mercury-containing products GPA items: 1, 17, 45, 54, 57	Pesticide Action Network Mauritius (PANeM)	Mauritius
	2013 International lead poisoning prevention week of action activities GPA items: 1, 7, 9, 57, 112	Sustainable Research and Action for Environmental Development (SRADev)	Nigeria
	Development and dissemination of outreach materials for awareness raising on POPs GPA items: 112, 114, 116	Rwandese Association of Ecologist (ARECO)-RWANDA NZIZA	Rwanda
	Establishing and maintaining the East Africa SAICM Stakeholders Network GPA items: 9, 102, 112	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
	Mercury measuring in educational and healthcare facilities and artisanal and small scale mining practices in Tanzania GPA items: 45, 57	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
	2013 International Lead Poisoning Prevention Week of Action activities GPA items: 1, 7, 9, 112	Agenda for Environment and Responsible Development (AGENDA)	Tanzania

	2014 International Lead Poisoning Prevention Week of Action activities GPA items: 1, 7, 9, 112	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
	Developed video shots for waste management practices in Dar es Salaam GPA items: 72, 73	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
	Advocacy and awareness-raising towards toxic-free malaria control without DDT GPA items: 1, 27, 29, 54, 82	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
	Global Mercury Hotspots Report GPA items: 57, 63, 76, 80	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
	Africa NGO and CSO Chemical Safety Skillshare and Workshop, 10-12 December 2012, Dar-es-Salaam, Tanzania (by AGENDA in collaboration with IPEN) involved 42 participants from 20 NGOs/CSOs, government representatives and media GPA items: 43, 45, 51, 57, 67, 76	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
	Established a community radio in the district of Hoima; the Community Green Radio (www.greenradio.ug) which has been one of the most important tools of enhancing community awareness on the sound management of chemicals GPA items: 9, 102, 112	National Association of Professional Environmentalists (NAPE)	Uganda

	Awareness activities (workshops) for artisanal gold miners in Mubende district and general awareness on chemicals management on the Community Green Radio (www.greenradio.ug) GPA items: 9, 102, 112	National Association of Professional Environmentalists (NAPE)	Uganda
	Produced awareness materials (calendars, T-shirts and brochures) to raise awareness on chemicals management on mining and in consumer products. Articles have also been published in NAPE Lobby magazines on chemicals GPA items: 9, 102, 112	National Association of Professional Environmentalists (NAPE)	Uganda
	Creating public awareness about the Minamata Convention on Mercury and mercury pollution in Uganda GPA items: 9, 54, 57 102, 112	Probiodiversity Conservationists in Uganda (PROBICOU)	Uganda
	Raising public awareness on dental amalgam phase -down in Uganda GPA items: 17, 57, 163, 195	Probiodiversity Conservationists in Uganda (PROBICOU)	Uganda
	Awareness-raising on POPs chemicals in Mbale GPA items: 112, 114, 116	Probiodiversity Conservationists in Uganda (PROBICOU)	Uganda
	Awareness-raising on Minamata Convention GPA items: 9, 54, 56, 57	Probiodiversity Conservationists in Uganda (PROBICOU)	Uganda
	Raising Public Awareness on Dental Amalgam Phase -Down in Uganda GPA items: 17, 57, 163, 195	Probiodiversity Conservationists in Uganda (PROBICOU)	Uganda

	Advocacy on the global elimination of mercury-containing products by advocating for the use of mercury-free products in Uganda GPA items: 54, 56, 57, 64, 76, 112	Probiodiversity Conservationists in Uganda (PROBICOU)	Uganda
Governance	Drafting team of an e-waste management regulation for Ethiopia GPA items: 1, 13, 15, 43,57	Pesticide Action Nexus (PAN) Ethiopia	Ethiopia
	Conducted advocacy for early ratification of the Minamata Convention by the government and development of the NAP. GPA items: 9, 54, 56, 57	KASA	Ghana
	Advocacy on phasing-out dental amalgam GPA items: 17, 57, 163, 195	Pesticide Action Network Mauritius (PANeM)	Mauritius
	Contributing to the preparation/implementation of the Minamata Convention on Mercury, with a focus on developing strategies to implement mercury-added product phase-out provisions of the Minamata Convention in Nigeria GPA items: 9, 54, 56, 57	Sustainable Research and Action for Environmental Development (SRADev)	Nigeria
	Steering Committee member of the South African National Committee on Chemicals Management and Multi-stakeholder GPA items: 195, 196, 211	groundWork	South Africa
	Working in collaboration with the government for broad National Chemicals Management Bill GPA items: 195, 196	groundWork	South Africa

	The Minamata Convention on Mercury: What Does it Mean? GPA items: 9, 54, 56, 57	groundWork	South Africa
	Assessment of marine pollution from heavy metals and nutrient loading GPA items: 7, 9, 57	Environmental, Water, Health, Sanitation and Safety Ardent (Ewa-SHESA)	Tanzania
	Assessment of the level and type of waste dumping and urban farming along Mlalakuwa and Mbezi rivers in Dar Es Salaam GPA items: 23, 64, 69	Environmental, Water, Health, Sanitation and Safety Ardent (Ewa-SHESA)	Tanzania
	Promotion of waste prevention through encouraging reusable/recyclable consumer goods and biodegradable products in Tanzania GPA items: 69,70,71,72, 73 ,161	Irrigation Training and Economic Empowerment Organization (IRTECO)	Tanzania
	Promotion of Integrated Pest and Vector Management in communities and schools GPA items: 23,27, 29,51, 114,116	Tanzania Association of Public, Occupational and Environmental Health Experts (TAPOHE)	Tanzania
	Advocacy work around chemical governance in Uganda GPA items: 63, 195, 196	National Association of Professional Environmentalists (NAPE)	Uganda
	Participated in the reviewing of the National Environment Act and the National Environment policy GPA items: 195, 196	Probiodiversity Conservationists in Uganda (PROBICOU)	Uganda
	Participating in the revising of the implementation plan on persistent organic pollutants GPA items: 1, 15, 56, 68, 164, 169, 170, 174	Probiodiversity Conservationists in Uganda (PROBICOU)	Uganda

Capacity Building	Education of small scale gardeners on safe pesticides management and handling along Lake Victoria, Kenya GPA items: 23,27, 29,51, 114,116	Centre for Environment Justice and Development (CEJAD)	Kenya
	Trained farmers and agricultural workers on the harmful effects of chemical pesticides on health and the environment GPA items: 27, 31, 51,114	Pesticide Action Network Mauritius (PANeM)	Mauritius
	Submitted inputs on the MCCM minutes, Chemical Awareness Raising Action Plan and the Work Programme for 2015/16 GPA items: 1, 2, 74, 76, 77	groundWork	South Africa
	Capacity-building for waste management status in Dar es Salaam, Tanzania GPA items: 72, 73	Agenda for Environment and Responsible Development (AGENDA)	Tanzania
	Trained farmers on preparation and use of organic pesticides GPA items: 23,27, 51, 114	Environment, Human Rights Care and Gender Organization (ENVIROCARE)	Tanzania
	Promotion and organization of participatory trainings in Integrated Pest Management alternatives and ecological agricultural practices, including bio‑chemical alternatives to organic chemicals GPA items: 23,27, 29,51, 114,116	Irrigation Training and Economic Empowerment Organization (IRTECO)	Tanzania
	Training communities in self-surveillance and reporting of pesticide poisoning incidences, Lake Eyasi Basin, Karatu and Kilolo Iringa GPA items: 23,27, 29,51, 114,116,	Tanzania Association of Public, Occupational and Environmental Health Experts (TAPOHE)	Tanzania

	Put in place a network of NGOs promoting the sound management of chemicals - the Network on Sound Management of Chemicals – Uganda (NESMAC-U) to enhance the implementation of SAICM GPA items: 9, 102, 112	National Association of Professional Environmentalists (NAPE)	Uganda

Central and Eastern Europe (CEE)

The IPEN CEE region is divided into two parts: European Union (EU) member states and non-EU states. EU member states include Bulgaria, Croatia, Czech Republic, Hungary, Estonia, Lithuania, Latvia, Poland, Romania, Slovakia, and Slovenia. Non-EU countries include Albania, Belarus, Bosnia and Herzegovina, Macedonia (EU accession country), Montenegro, Serbia (including Kosovo), and Turkey (EU accession country). While implementation of chemical safety legislation and its enforcement is governed according to EU rules in the northwestern and central part of our region, it is quite different in its eastern and southeastern part. However, these two parts are coming closer.

Generally NGOs in the CEE region are not usually part of a government implementation committee or process and the level of encouragement of their involvement is limited. Involvement of NGOs in developing strategies and openness of governments to involve NGOs in their SAICM implementation activities are not on the highest level. However, some NGOs have been carrying out activities directly focused on SAICM implementation in their countries and in the region.

According to experiences of NGOs from the CEE region, National SAICM Focal Points seem to be accessible. At the same time NGOs rarely contact them, as activities focused primarily and explicitly on SAICM implementation are not common in the region. Also, the NGOs are often not motivated to work with Focal Points or are not aware of possible benefits of communicating with the Focal Points. However, some NGOs do engage with them; for example, NGOs are in good contact with their national Focal Points in Hungary. Also, it can be said that there is a good level of cooperation between NGOs and different state institutions relevant to SAICM implementation (ministries, state agencies, etc.). In some countries, the absence of a coordinating body responsible for SAICM implementation makes it difficult for NGOs to monitor the progress of SAICM implementation effectively.

EU countries have to meet many obligations regarding chemical safety rules. There are specific EU directives (needed to be introduced into the national legislation by national laws) or regulations (directly applied to national legislation). This includes the regulation on Registration, Evaluation and Authorization of Chemicals known under its abbreviation as REACH. Unfortunately, it does not mean that SAICM is fully implemented in EU member states. For example, the Pollutant Release and Transfer Register (PRTR) in the Czech Republic is under continuous pressure from industry because it also requires chemical-specific reporting on wastes. Waste management regulation is under pressure within the EU in general (e.g., limit values for dioxins).

SAICM must also be viewed as a process by which developed countries improve chemicals management. All signatory countries of SAICM made a firm commitment in 2006 at ICCM in Dubai that the sound management of chemicals is essential to achieve sustainable development and that concerted actions need to be taken to reach the 2020 goal. This means that developed countries should be establishing inter-ministerial coordination committees, as well as involving civil society in decision-making, fully protecting industrial and agricultural workers, and implementing sufficient policies and programs to promote safe and effective alternatives and substitutes to persistent, bioaccumulative, and toxic substances (PBTs) as called for in the SAICM GPA, among other places.

Chemical safety in the region is improving in general, but it could be faster, according to NGOs. The discourse of economic crisis still negatively affects improvement of chemical safety.

Challenges and gaps

A number of significant gaps for SAICIM implementation in the CEE region remain to be addressed. There are still sites contaminated by industrial activities where there is a need for clean-up. Contaminated sites include both working enterprises and obsolete factories and dumpsites. Many landfills in both EU and non-EU countries are in unsatisfactory condition (for example, missing drainage systems), which is especially problematic when combined with the insufficient level of hazardous waste separation. Clean-up activities can be considered slow and non-transparent due to insufficient enforcement and insufficient finances available. Also, there is a lack of compulsory action plans.

Inadequate waste management and weaknesses of new waste legislation regarding chemical safety are a significant problem. The waste framework directive and Persistent Organic Pollutants (POPs) regulations allow the release of significant volumes of POPs through the waste flow, promotion of technologies producing new POPs (such as incineration of wastes), and more open borders to waste movement. Also, electronic and electrical waste (e-waste) is certainly an important issue, mainly in non-EU and new EU member countries. Procedures and facilities for adequate treatment for this emerging type of waste are still lacking and enforcement of regulations that do relate to e-waste is weak. Also in the EU, the procedures for collection and management of e-waste are sometimes not clear enough. A significant amount of e-waste continues to be mixed with municipal waste in both EU and non-EU countries.

Another example of a gap in handling waste properly is the European PRTR, in which waste is not required to undergo chemical-specific reporting, but only in total amounts of hazardous waste generated by facilities reporting to PRTR. European PRTR also does not cover all industries, but by majority only those for which Integrated Pollution Prevention and Control (IPPC) permits are required. In non-EU countries (for example Belarus), the PRTR system is lacking, so there is low availability of information about chemicals in the environment and chemicals in products.

EU policy on POPs is mainly heavily oriented on air releases and does not pay enough attention to other pathways of pollution by POPs.

Additionally, there are still double standards in chemical policy between EU and non-EU countries. The non-EU countries still have different (usually weaker) legislative and other measures to control chemicals. In these countries, the lack of clear communication and information-sharing procedures between various state institutions and the absence of an integrated program of chemicals management are problems.

There is also a need for strengthening multi-stakeholder approaches to develop chemicals management strategies on the national level. Although communication among stakeholders might be relatively vital, the tools and formal procedures for involvement of the public and NGOs in development of strategies are weak or lacking. This fact resonates with increasing lack of funding for civil society activities due to the economic situation of European countries. The lack of financial sources results in a continuous decrease of civil society services and activities. It is also an obstacle in building capacities of civil society and independent experts. This problem is compounded due to budget cuts in some countries' state environmental and/or health institutions. Also, lack of industry involvement into implementation and financing of SAICM is a limitation for a multi-stakeholder approach. There is little understanding among business/industry representatives about their role in SAICM implementation. In fact, they have very little knowledge about SAICM at all.

Lack of regular monitoring data and low accessibility by the public to data that is available is common in most of the non-EU countries in the region. This is also due to the lower capacity of laboratories available in these countries. However, even the situation in some EU countries is not satisfactory. Usually there's a problem with a low emphasis on awareness-raising, the ability of public to use the information, and the adequacy of monitoring. Moreover, in non-EU countries, there is sometimes a problem with lack of laboratory capacity that makes it impossible to study chemicals such as dioxins or POPs without significant expenditures for international transport. In general, there are still many HHPs being used; many hazardous substances (like endocrine disrupting chemicals) are on the market, in cosmetics, food, and other everyday products (pesticides, phthalates, triclosan, etc.); multiple pesticide residues can still be found in food (especially in food from non-EU countries) and substitution within REACH is not happening.

SAICM implementation by NGOs in CEE region

In general, actions of NGOs in the CEE region focused on the issues connected to SAICM are rather limited. We assume that this is mainly due to the low availability of funding for such activities and by the high popularity and attractiveness of other environmental issues (energy, global warming, etc.) among the public and NGOs in the region. However, there is still a number of NGOs systematically working on the issue of chemicals management. Most of the activities fall under the Knowledge and Information category, but there is also a significant amount of work focused on Capacity Building and Governance.

CSOs affiliated with IPEN have carried out various activities related to the national implementation of the SAICM GPA. Below are some examples of SAICM implementation from NGOs in the region.

SAICM Objective	NGO Activity and Results	Names of NGOs	Country
Risk Reduction	Report and campaign on medical waste in Albania GPA items: 54	EDEN Center	Albania
	Global Mercury Hotspots report GPA items: 2, 57, 80, 85	EDEN Center	Albania
	Monitoring of water sources GPA items: 163	Center for Environmental Solutions (CES)	Belarus
	Campaign against illegal waste disposal in Ježdovečkoj woods GPA items: 47	Zelena Akcija	Croatia
	Mercury In Chemical Industry – a Toxic Legacy In the CEE Region GPA items: 47, 57, 63, 85	Arnika	Czech Republic
	Loom bands sampling GPA items: 43, 54, 63	Arnika	Czech Republic
	Sampling toys and consumer products for content of toxic chemicals GPA items: 43, 54, 63	Arnika	Czech Republic
	Sampling of Rubik cubes in the various countries of the region GPA items: 43, 54, 63, 80, 112	Arnika	Czech Republic
	Global Mercury Hotspots report GPA items: 2, 57, 80, 86	Arnika	Czech Republic

	Participation in the Expert Group on Best Available Techniques & Best Environmental Practices under the Minamata Convention on Mercury GPA items: 106, 168	Arnika	Czech Republic
	Campaign for clean-up of Debrecen Izotoptech toxic waste repository GPA items: 47, 68	Greenpeace CEE	Hungary
	Budapest Chemical Works - Action proposal GPA items: 47	Greenpeace CEE	Hungary
	Civil society call for pollution reduction and prevention GPA items: 45	Eco-Sense	Macedonia
Knowledge and Information	Let`s keep control on the mercury around us! Public awareness-raising on mercury in food and cosmetics GPA items: 89, 112	EDEN Center	Albania
	The Household Guide to Chemical Safety GPA items: 112, 135, 150, 163	Center for Environmental Solutions (CES) & Arnika	Belarus
	Database of chemicals in products in Belarus GPA items: 112, 135, 163	Center for Environmental Solutions (CES) & Arnika	Belarus
	Public Information Center on chemicals and wastes for the public GPA items: 112, 163	Center for Environmental Solutions (CES) & Arnika	Belarus
	International multi-stakeholder conference / skillshare meeting on chemicals in consumer products GPA items: 106, 167	Center for Environmental Solutions (CES) & Arnika	Belarus

Guide for Chemical Safety and Waste in Belarus GPA items: 112, 135, 150, 163	Center for Environmental Solutions (CES) & Arnika	Belarus
Report: Toxic Toy or Toxic Waste: Old POPs in New Products GPA items: 106, 112	Arnika	Czech Republic
Integrated Pollution Register GPA items: 125	Arnika	Czech Republic
Consumer's guide to sustainable household GPA items: 112, 135, 150, 163	Arnika	Czech Republic
International conference on toxic chemicals with NGOs from Kazakhstan, Belarus, Thailand, China and the Czech GPA items: 135	Arnika	Czech Republic
Mercury pollution around coal firing power plants in three Balkan states: Montenegro, Serbia, Bosnia & Herzegovina GPA items: 113	Arnika	Czech Republic
On-line map of toxic hot-spots in Mangystau region in Kazakhstan GPA items: 113	Arnika - Toxics and Waste Programme, CINEST, EcoMuseum	Czech Republic, Kazakhstan
Round tables and conferences on toxic pollution in Ekibastuz, Balkhash, Temirtau and Astana GPA items: 106, 167	Arnika - Toxics and Waste Programme, CINEST, EcoMuseum	Czech Republic, Kazakhstan
Collection of data on industrial chemical pollution GPA items: 2, 57, 80, 85	Arnika - Toxics and Waste Programme, CINEST, EcoMuseum	Czech Republic, Kazakhstan

	"Chemicals and Life" - a booklet for consumers GPA items: 112, 135, 150, 163	Arnika - Toxics and Waste Programme, CINEST, EcoMuseum	Czech Republic, Kazakhstan
	Serbian response to global Mercury Treaty GPA items: 89, 112, 155, 164	ALHem	Serbia
	Awareness-raising on substitution GPA items: 83, 94, 112, 163	ALHem	Serbia
	Brochure on Zero Waste concept GPA items: 70	SPZ	Slovakia
Capacity Building	Educational program *"Ecostart"* (duration is 6 months), focused on involvement of students and after-graduates into environmental campaigning in several priority areas in Belarus, including chemical safety and waste management GPA items: 69, 73	Center for Environmental Solutions	Belarus
	Guide & presentation on chemical sampling; capacity building for NGOs GPA items: 83, 135	Center for Environmental Solutions	Belarus
	Trainings on chemical safety for mothers GPA items; 112, 163, 164	Center for Environmental Solutions	Belarus
Governance	Report about importance of joining of Belarus to Minamata Convention on mercury GPA items: 165, 169	Center for Environmental Solutions	Belarus

Eastern Europe, Caucasus, and Central Asia (EECCA)

Since 2012, some EECCA countries began going backwards in their efforts to achieve sound chemicals management. Two countries of Central Asia (Uzbekistan and Turkmenistan) are still not Parties to the Stockholm Convention or the Rotterdam Convention and one EECCA country is still not a Party to the Basel Convention. So far the Minamata Convention has not been ratified by any of the EECCA countries. In addition, some EECCA countries do not have governmental agencies responsible for SAICM implementation. National SAICM Focal Points are changed very often. In some countries they have not been appointed yet.

Gaps in the implementation of the Stockholm and the Rotterdam Conventions

The majority of EECCA countries have not turned in national implementation plans (NIP) updates for the 9 POPs listed in 2009 and 2011 under the Stockholm Convention on POPs. Some EECCA countries still need to ratify new POPs listed under POPs treaty since 2009.

The latest Triple COP (May 2015) of three chemical conventions clearly indicated the negative impact of the industrial lobby on some EECCA countries. As a result, many decisions scheduled for adoption were blocked by a small number of countries, including some from the EECCA region. Some of these decisions were blocked for the fifth time, which makes chemical conventions much less effective.

So far countries of the region have been passive and silent at the chemical Conferences of the Parties (COPs). It was a shame that the only active behavior was obvious during the decision on whether to include chrysotile asbestos under the Rotterdam Convention. Acting under pressure of the industrial lobby, some EECCA countries joined a small pool of countries to block the addition of the substance to the Convention.

The EECCA countries have not yet agreed on compliance mechanisms for the Stockholm and the Rotterdam Conventions though it is an important tool for providing technical and financial support to countries in their efforts to implement the treaties.

The EECCA countries did not express a strong position regarding the waste disposal threshold levels for the brominated flame retardants that are now included in the general POPs guidelines as an outcome of the Triple COP. However, many EECCA countries noted in the corridors that lack of capacity would not allow them to deal with POPs-contaminated waste effectively. NGOs encouraged governments to strongly support lower waste content limits for POPs to avoid export of highly contaminated wastes and recycled products (including building insulation, upholstery and electronics) from developed countries to the EECCA region. Lack of or no support to the low POPs content threshold from the EECCA region contributed to the decision made at the Triple COP that allows high levels of brominated flame retardants to be present in waste.

Transboundary movement of electronic waste and used electronic and electrical products is a new and emerging issue for the EECCA countries; however, governments do not contribute enough to strengthening the national legislation accordingly. The region missed the opportunity to highlight the problem with the technical guidelines on electronic waste that were adopted at the Triple COP and opened the way for uncontrolled amounts of e-waste entering developing countries and economies in transition. EECCA countries do not have proper legislation or

infrastructure to effectively address this new problem. Urgent attention should be paid to the development of national legislations that will put a ban on e-waste imports from other countries. The polluter pays principle and take-back policies should be well implemented to allow return of e-waste back to producers for further recycling and disposal.

Mercury contamination and benefits of the ratification of the Minamata Convention
The signing of the Minamata Convention on Mercury opened new possibilities to address mercury-related problems at the national level. However, only five out of 12 EECCA countries signed the Treaty. EECCA countries lack national plans or strategies aimed at managing and solving mercury contamination problems.

The majority of countries do not have waste recycling facilities nor practice waste separation or recycling. Often domestic and industrial wastes are dumped together. Mercury-containing waste (used batteries, broken lamps, etc.) ends up in municipal landfills, which become significant sources of mercury emissions and releases to the air.

An IPEN project in Armenia revealed chaotic dumps of industrial waste on the bank of the river Hrazdan in Yerevan. Obsolete mercury-containing equipment, mercury-containing lamps and other mercury contaminated devices have been dumped there from the 1990s until today.

An IPEN project in Kazakhstan showed that Kazakhstan has not yet developed plants for recycling energy-saving light bulbs containing mercury. The waste companies in Almaty are forced to store waste containing mercury in special tanks. There have been some attempts in some cities in Kazakhstan to open stations where local citizens could bring their used energy-saving light bulbs containing mercury; however, this issue is still not resolved at the national level. People very often throw used energy-saving light bulbs containing mercury in regular dumpsters. This is dangerous because the bulbs might be broken and mercury could contaminate water and soil. It is important to explain to the general public that mercury is dangerous and that the energy-saving light bulbs containing mercury and other consumer goods containing mercury, such as thermometers, require handling with care. To date the government is far behind in addressing this issue.

Lack of monitoring data on mercury in the environment and lack of or no monitoring data on the amounts of produced, used and disposed of mercury-containing equipment is a big problem in Kazakhstan. It addition, there aren't any legal requirements to register mercury users. Low effective management of mercury-containing waste; low public awareness on mercury threats; and broad use of mercury-containing energy efficient bulbs are among key problems faced by Kazakhstan.

IPEN Participating Organizations (POs) also noted that there are zones in Kazakhstan with high levels of mercury contamination that happened during the Soviet period. Decommission of the mercury-based chlor-alkali facility in Pavlodar resulted in the release of 900 tons of mercury into the environment, which ended up in soil and underground waters. Another mercury hotspot is located in Temirtay city, where acetaldehyde production in the period of 1950-1997 resulted in the release of 1500 tons into the Nurariver.

An IPEN project in Kyrgyzstan helped to collect data about mercury contamination in soil, water and air in the vicinity of Khaidarkan and Chauvai mercury mines with the aim to analyze the levels of mercury in the environment. Based on results from laboratory testing, it was learned that mercury concentrations in the soil in the Chauvai area are above the maximum allowable concentration (MAC). Mercury concentrations in water samples were also higher than regulatory limits.

IPEN POs in Kyrgyzstan faced major difficulties trying to make the laboratory data public and communicate it to the workers and administration of Chauvai and Khaidarkan mercury mining facilities. The administration of the facilities strongly opposed any attempts to analyze environmental media in the nearby communities. To oppose any attempts to communicate data to the public, the administration of the mercury mining facilities gained support from criminal structures as well as the local municipal administration. Local laboratories are now scared of taking samples from the area for analysis. Nevertheless, data collected in the frame of the project was presented to the Kyrgyz Ministry of Economy, at the meeting of a working group set up to make a proposal to the government regarding the ratification of the Minamata Convention.

An IPEN PO in Tajikistan conducted an assessment of mercury emission sources from health care facilities and mining industries. The assessment of local health and environmental impacts of mercury emission sources (results of analytical measurements of soil samples, ores and water samples, surveys of local residents in rural areas and in Dushanbe, and statistical data) was conducted. Information materials and brochures on mercury sources in Tajikistan, their health and environmental impacts, accessible methods to mitigate mercury pollution and safe alternatives were produced and disseminated among stakeholders.

The Tajik PO also purchased mercury-free thermometers, blood pressure devices, and containers for hazardous mercury waste, which were delivered to targeted public hospitals and municipalities. A special site for collecting mercury-containing household waste such as mercury-containing light bulbs, thermometers, and other devices was built in Dushanbe, at the municipal waste dump for collection of mercury-containing waste. Four outlets for collection of burnt compact florescent bulbs (CFBs) were equipped and renovated in Dushanbe.

In 2013, Russia started a Global Environment Facility (GEF)-funded project aimed at developing an inventory of mercury pollution sources in the country. The project proved to be very efficient as it helped to prepare the country for the ratification of the Minamata Convention. There is an intention to develop a national action plan to address mercury pollution sources and reduce mercury impact on the health of people and the environment. Russia does not have primary mercury mining on its territory; however, chlor-alkali industries using mercury-based technology is still a significant problem in the country. Coal-fired power plants are not considered to be a major source of mercury pollution due to the low mercury level in coal in Russia and the relatively small part coal has in the overall national energy balance in Russia. Other mercury pollution sources include cement plants, metal production, waste incineration, waste landfills, oil refinery, and production of mercury-containing devises (including conventional thermometers and energy efficient lamps). Only about 10% of industrial mercury- containing wastes are recycled.

As mentioned, chlor-alkali industries producing chlorine gas and alkali (sodium hydroxide) by a process that applies electrolysis to saltwater using mercury as the electrolysis cathode are still active in some EECCA countries. A single mercury-cell plant may contain hundreds of tons of elemental mercury for use in production and may have even more mercury in its warehouses to replenish lost mercury. This occurs at the "Kaustik" facility in Volgograd, Russia.

An IPEN project in Volgograd helped to collect fish and hair samples close to "Kaustik" to confirm whether the long-lasting production of chlorine by using mercury in amalgam electrolysis resulted in food source contamination of fish and also had potentially influenced levels of mercury in the local population of people.

Mercury-based production of chlorine was launched in 1968 in "Kaustik", while in 1984 diaphragm electrolysers were also put into operation. Now, both production lines are operational. According to the inventory results conducted by the regional Service for Supervision of Natural Resource Usage and Environmental Prosecutor's office in 2008, overall, the facility releases 0.689 tons of mercury per year. There is also a significant amount of waste produced by "Kaustik" Co., including wastes containing mercury (Kaustic Co. 2007). In 2009, there were barrels and drums completely filled with mercury-containing waste and sludge and stored on the bare ground without any protective covers or soil lining.[28] As a result, in warm seasons, mercury vapour releases from the dump cause mercury pollution of the ambient air. The amount of mercury in the waste-water disposal system is about 395.8 kg per year.

Data collected in the frame of IPEN project showed that average mercury levels in some types of fish were more than twice the US Environmental Protection Agency (EPA) reference dose. Some samples also exceeded the European Union (EU) maximum level for mercury in foodstuffs (fish) at 0.5 ppm w.w. Some samples also exceeded the limit value for mercury in fish set up in Russia at 0.6 ppm w.w. The average level of mercury in the hair of all 28 volunteers in the project was nearly two-times higher than the US EPA reference dose. Approximately two-thirds of the people exceeded the reference dose. The maximum level of mercury in hair was almost 5.5-times higher than the reference dose.

An IPEN project carried out from 2014 – 2015 in the Krasnodar region, Russia also revealed mercury contamination of soil in the communities located close to the facilities processing mercury-contaminated wastes where about 37,000 tons of mercury ore are stored. The project results stated that there are no concrete plans to clean-up the contaminated site.

This and other NGO-generated information on mercury contamination in EECCA countries resulted in the adoption of an NGO Appeal towards the governments on early ratification and effective implementation of the Minamata Convention. The Appeal clearly explains the benefits of the ratification and entering into force of the Treaty. In the Appeal it is emphasized that using best available techniques (BAT) and best environmental practices (BEP) under the Minamata Convention will result in energy efficiency and mercury emission and release reduction from industrial sources. Entering into force of the Minamata Convention will also facilitate

[28] There are 107 barrels containing about 70.0 tons of waste.

investments and technology transfer that will help to reduce mercury contamination of the environment and people.

NGOs stressed that the ratification of the Mercury Treaty should become a priority for EECCA. By ratifying the Convention, governments of the region will prove their decision to ensure that the Minamata tragedy will not happen again anywhere in the world and that human rights to health and safe environment will be duly met.

Gaps in SAICM Implementation

The EECCA countries face serious difficulties in implementing SAICM Global Plan of Action items and in meeting SAICM suggestions regarding emerging policy issues. As a voluntary process, SAICM does not require any legal obligations but encourages countries to apply a multi-stakeholder approach to achieve chemical safety nationally and globally. Unfortunately, this unique feature of SAICM has been very much undervalued in EECCA. Some EECCA countries have expressed a low level of interest in implementing SAICM and have not even established a national focal point or designated a governmental agency responsible for SAICM implementation. Their participation in SAICM-related meetings is inactive and does not contribute much to the process. Frequent changes of heads of the relevant ministries and their teams do not improve the situation but instead contribute to the overall lack of understanding of SAICM objectives and means of implementation. Stakeholders in the EECCA region have different visions of SAICM priorities and approaches to properly meet them.

Only a few EECCA countries have implemented SAICM projects since 2012. Tajikistan and Kyrgyzstan are among those countries which recently successfully completed Quick Start Programme-funded projects related to supporting SAICM and GHS (Globally Harmonized System of Classification and Labelling of Chemicals) implementation in their respective countries. The final workshops for the projects were held in June 2015 in Dushanbe and Bishkek, and were attended by representatives from various ministries such as the Ministries of Health, Economic Development and Trade, Agriculture, Energy, Industry and Transport, as well as state agencies on Environment Protection and Forestry, other related agencies, scientific and research institutes, consulting companies and more.

Projects in both Tajikistan and Kyrgyzstan were implemented jointly by governments and NGOs. In Tajikistan, IPEN PO (Foundation in Support for Civil Initiatives – FSCI), in partnership with the Tajik Ministry of Health and the United Nations Institute for Training and Research (UNITAR), led the work on the development of a National GHS Implementation Strategy and Action Plan. The Coordination Committee formed in the frame of the project conducted many trainings and awareness-raising meetings where GHS requirements, pictograms, classification and labeling were presented and discussed in detail with stakeholders. FSCI initiated the development of recommendations on the GHS implementation for inclusion into the National Sustainable Development Strategy of Tajikistan (NSDS). NSDS will be approved in November 2015 for the period until 2030.

In Kyrgyzstan, the Ministry on Economy and Antimonopoly Policy and IPEN PO Independent Ecological expertise (IEE) led the process to develop a GHS Implementation Programme and Action Plan, and IEE presented the Plan at the workshop in Bishkek and answered questions

related to the implementation of the GHS requirements in different economic sectors. Tremendous success was achieved when a Kyrgyzstan governmental decree was adopted that confirms the approval of the Plan. The Ministry on Economy and Antimonopoly Policy and IEE will continue monitoring the implementation of the Program requirements as well as to assist relevant ministries and other stakeholders in GHS implementation in different sectors.

Waste accumulation is a huge problem in all EECCA countries. There is a lack of technologies dealing with waste elimination, reprocessing and recycling. Industrial waste comprises the greatest amount of waste in the EECCA region and is generated by mining and metal producing plants, the chemical industry, and energy power plants. Accumulation of hazardous waste causes serious problems to the environment and health in EECCA. The lack of technologies for waste elimination results in waste storage on the territories of industrial facilities, which are usually located close to communities. Some EECCA countries are making a strong shift towards waste incineration (dealing with all types of waste), which, if successful, will add more pollution to the environment and become a significant source of negative impact on the health of people.

Obsolete pesticide stockpiles remaining after the collapse of the Soviet Union is still a significant problem in EECCA. Some countries have not finalized obsolete pesticide inventories yet. Many obsolete pesticide stockpiles are open to the public and cattle.

This problem becomes worse as countries now have to deal with new amounts of produced and imported pesticides, including highly hazardous pesticides (HHPs). In an NGO project on HHPs in EECCA, IPEN POs compared their national lists of pesticides that are being used with the list of Highly Hazardous Pesticides (HHPs list 2013) that was developed using the criteria of the Food and Agriculture Association (FAO) / World Health Organization (WHO) Joint Meeting on Pesticide Management (JMPM) in 2008. HHPs were found in each EECCA country involved in the survey. The number of pesticides varied from 32 in Ukraine to 9 in Tajikistan.

NGOs revealed that there is very low awareness about HHPs in the EECCA region. Gaps in information flow result in continued production and use of HHPs in the region. Based on the preliminary analysis, Belarus is currently using about 10 HHPs that are included in the HHPs list 2013, Moldova currently uses 15 HHPs, and Russia currently uses 29. In addition, Moldova faces serious problems with illegal pesticide use and with about 1600 pesticide-contaminated sites.

In Russia, there are 20 various 2,4-D formulations under a wide variety of brand names. Countries are in need of information and looking for FAO to prepare an information paper on replacing HHPs with safer alternatives. Information from Tajikistan proved that some experts who helped Tajikistan develop a national catalogue of allowed pesticides promoted the use of HHPs. After making the comparative analysis with the HHPs list 2013, IPEN POs in Tajikistan revealed 9 HHPs that were recommended and approved by Tajikistan for agricultural needs.

IPEN POs from Ukraine raised an issue of pesticides based on the 2,4D. In Ukraine there are 65 various 2,4 D formulations under a wide variety of brand names. It was also noted that 97 companies from 24 countries import HHPs to Ukraine, including those based in the EU, Russia and China.

IPEN POs from Kazakhstan noted that Kazakhstan has 506 registered pesticides with 15 to 20 new formulations added annually. As compared to 2005, in 2010, the import of pesticides increased by 2.2 times. Similar to Ukraine and Russia, Kazakhstan has various 2,4-D formulations under different brand names.

IPEN EECCA regional workshops held in 2015 adopted an NGO Statement that calls on governments of EECCA to take concrete steps towards a progressive ban of HHPs and their substitution with safe alternatives, non-chemical alternatives and ecosystem-based approaches. The Statement was delivered to the relevant governmental ministries and agencies that are responsible for import, use and disposal of pesticides in the countries of the region. The Statement was also uploaded on NGO websites and was made accessible to all stakeholders, including farmers and industries producing pesticides.

Waste management in EECCA faces different challenges, from dealing with industrial wastes and pesticides to consumer products when they become waste. Many types of consumer products contain hazardous chemicals, including POPs, heavy metals and other endocrine disrupting chemicals (EDCs) that cause significant and often irreversible health effects to people (including fetuses and newborns). Nevertheless, these products end up in municipal landfills and continue leaking chemicals into soil and groundwater. Unfortunately, EECCA countries have very little or no information on chemicals in consumer products on their markets. Labels on consumer products, including toys and other products for children, lack important information such as data on chemical ingredients, contacts of manufacturers, and recommendations for safe handling and disposal.

IPEN's 2013 project on chemicals in children's products, implemented in 7 countries of EECCA, contributed a lot to raising awareness of all stakeholders (including governments, industry and the general public) on toxic metals in products for children. Contaminated items were found among schoolbags, balls, dolls, cosmetics for children, construction kits, sports equipment, toy vehicles, and others. It is necessary to emphasise that such items were sold by major supermarkets, small retail sales outlets and by petty traders at marketplaces or elsewhere. By biting, licking, sucking, chewing, hugging and squeezing toxic toys (and then putting their hands in their mouth or rubbing their eyes), children may become exposed to hazardous toxic metals. Young children are more susceptible to the effects of toxic metals exposure because they absorb several times over the percent ingested by adults and because their brains and other systems and organs are not fully developed. Even brief exposures may influence developmental processes.

It is obvious that No data – No market should become a key principle for children's products. Additionally, in many cases health safety certificates on the labels do not guarantee the chemical safety of products, including products for children. There is no regular practice in EECCA to recall consumer products that do not meet state health and safety standards; nor is there any information about products recalled in other countries available to consumers. Thus one can easily buy recalled products in stores and marketplaces in countries of EECCA. Publicly available information about toxic chemicals in consumer products and a list of available toxic-free alternatives is urgently needed to guide consumers in this region.

NGO role in SAICM implementation

NGOs in the EECCA region play the leading role in SAICM implementation and do a lot in encouraging governments to properly address issues listed in the SAICM Plan of Action and on SAICM emerging policy issues. The following priorities are indicated by IPEN POs to be the key topics they consider of most importance for the region:

- Ratify all four international chemical conventions by all EECCA countries and enforce their implementation;
- Speed up the ratification of new chemicals under the Stockholm Convention by those EECCA countries that are Parties to the Convention and are thus legally obligated to do so;
- Conduct mercury health and environmental monitoring to identify and address mercury pollution sources and hotspots and encourage clean-up;
- Initiate regional projects to eliminate lead from paint with the goal to achieve internationally approved standards on lead in paint at the national level;
- Start pilot regional projects on the implementation of the Chemicals in Products Programme in EECCA, with the goal to achieve full information disclosure on hazardous chemicals in products, including endocrine disrupting chemicals and available safe alternatives;
- Develop national and regional lists of highly hazardous pesticides, including endocrine disrupting pesticides, and start a broad awareness-raising campaign on available safe alternatives and ecosystem based approaches; and
- Start abroad regional advocacy campaign on strengthening national legislation aimed at regulating e-waste import, including the implementation of extended producer responsibility principle.

SAICM implementation by NGOs in the EECCA region

Civil society organizations affiliated to IPEN have carried out various activities related to the national implementation of the SAICM Global Plan of Action. Below are some examples of SAICM implementation from NGOs in the region.

SAICM Objective	NGO Activity and Results	Names of NGOs	Country
Risk Reduction	Increased public health and environmental protection of farmers with plots near POPs hotspots GPA items: 112, 114, 115, 163	Armenian Women for Health and a Healthy Environment (AWHHE)	Armenia
	Promoting Organic Bee-Farming in Armenia GPA items: 112, 114, 115, 158, 160, 163	Armenian Women for Health and a Healthy Environment (AWHHE)	Armenia

Towards phasing-out mercury in products GPA items: 157, 163	Armenian Women for Health and a Healthy Environment (AWHHE)	Armenia
Reducing Human and Environmental Risks due to Obsolete and Banned Pesticides in Armenia GPA items: 47, 48, 115	Armenian Women for Health and a Healthy Environment (AWHHE)	Armenia
Community-based monitoring of storages of highly hazardous pesticides GPA items: 47, 48, 115	Armenian Women for Health and a Healthy Environment (AWHHE)	Armenia
Monitoring mercury in the air in Armenia, using Lumex GPA items: 82	Armenian Women for Health and a Healthy Environment (AWHHE)	Armenia
Health and Environmental Hazards of Mercury in Fish in Armenia GPA items: 47, 82	Armenian Women for Health and a Healthy Environment (AWHHE)	Armenia
Site Assessment and feasibility study of the Persistent Organic Pollutants (POP) and Obsolete Pesticides (OP) burial site in Nubarashen, Armenia GPA items: 80	Armenian Women for Health and a Healthy Environment (AWHHE)	Armenia
Test Paints for Lead in Nine Countries where No Data is Currently Available GPA items: 102-113, 256	RUZGAR	Azerbaijan

Research and Recommendations on Highly Hazardous Pesticides in 6 EECCA Countries	Center for Environmental Solutions	Belarus
Reducing risks of obsolete pesticides in Kakhetia region GPA items: 32-42, 158-160	ECOVISION	Georgia
Research and Recommendations on Highly Hazardous Pesticides in 6 EECCA Countries GPA items: 114	Greenwomen	Kazakhstan
Inventory of Contaminated Territories in Kazakhstan GPA item: 243	Human Health Institute	Kazakhstan
Research and Recommendations on Highly Hazardous Pesticides in 6 EECCA Countries GPA items: 114	Independent Ecological Expertise	Kyrgyzstan
Achieving Chemical Safety in EECCA GPA items: 161-163, 188	Eco-Accord	Russia

Leveraging the New Mercury Treaty, to Protect Local Communities from Mercury Pollution and Promote National Ratification of the Treaty in EECCA GPA items: 55, 161-163, 188	Eco-Accord	Russia
Lead in Enamel decorative Paints: A Nine Country Study into Russian GPA items: 55, 161-163,	Eco-Accord	Russia
Research and a Workshop on Asbestos Production, Use and Health effects in Russia GPA items: 11–20	Eco-Accord	Russia
Mercury Testing near Chlor-alkali plant: "Kaustik" plant in Volgograd, Mercury Hot Spot in Russia GPA items: 111	Volgograd-Ecopress	Russia
Mercury Testing near Chlor-alkali plant: "Kaustik" plant in Volgograd, Mercury Hot Spot in Russia GPA items: 111	Eco-accord	Russia
Characterization of a Mercury hot-spot in Kasnodar region, Russia GPA items: 57-60, 157	Volgograd-Ecopress	Russia

	Mercury Hot Spot in Kasnodar Region, Russia GPA items: 57-60, 157	Eco-Accord	Russia
	Mercury in Consumer Products (energy saving lamps) GPA items: 57-60, 157	Baikal Wave	Russia
	Mercury Hot Spots and Mercury Waste in Dzerjinsk, Russia GPA items: 57-60, 157	SPES, Ecological Center "DRONT"	Russia
	Research and Recommendations on Highly Hazardous Pesticides in 6 EECCA Countries GPA items: 114	Eco-Accord	Russia
	Joint Project with MTS-Ukraine on Battery Collection GPA Items: 121, 122	MAMA-86	Ukraine
	Research and Recommendations on Highly Hazardous Pesticides in 6 EECCA Countries GPA items: 114	MAMA-86	Ukraine
Knowledge and Information	A Regional Workshop entitled *"SAICM - a global international initiative for promoting and developing chemical safety goals"* GPA items: 2-6, 164, 206	Armenian Women for Health and a Healthy Environment (AWHHE)	Armenia

Mercury Country Situation Report by Armenian Civil Society Sector GPA items: 210-211, 215	Armenian Women for Health and a Healthy Environment (AWHHE)	Armenia
Awareness-raising on pesticide use and obsolete pesticides GPA items: 112, 114, 115, 163	Armenian Women for Health and a Healthy Environment (AWHHE)	Armenia
Say No to Chemicals in Our Environment (multi-partner project) GPA Items: 114, 115, 155, 160, 163	Armenian Women for Health and a Healthy Environment (AWHHE)	Armenia
Policy dialogue with the civil society in addressing mercury risks GPA items: 163, 164, 206	Armenian Women for Health and a Healthy Environment (AWHHE)	Armenia
Lead Poisoning Awareness Week GPA items: 102-113, 256	Khazer	Armenia
TV awareness program for children on waste and chemicals GPA items: 153-155, 161	ECOVISION	Georgia
Informing citizens on chemicals and wastes GPA items: 154-155, 161, 163	ECOVISION	Georgia
Lessons and lectures for TV, municipalities and schools: Clean-up Georgia GPA items: 161, 163	ECOVISION	Georgia

Informing citizens on the Minamata Convention on mercury to speed up the ratification process GPA items: 161-163	ECOVISION	Georgia
Lead Poisoning Prevention Week of Action GPA items: 161-163	Greenwomen	Kazakhstan
2015 National Public Awareness activities on mercury in Kazakhstan GPA items: 161-163	Greenwomen	Kazakhstan
Lead Poisoning Prevention Week of Action GPA items: 161-163	Tera-1530	Moldova
Raising awareness on EDCs in EECCA GPA items: 55, 161-163, 188, 217	Eco-Accord	Russia
Raising awareness on EDCs in EECCA GPA items: 55, 161-163, 188, 217	Chapaevsk Medical Association	Russia
Highly hazardous pesticides: public outreach as an important tool to reduce exposure GPA items: 55, 23-30, 114-117, 161-163, 188	Eco-Accord	Russia

Eco-Accord News Service on chemical safety GPA items: 141, 146, 161-163, 188, 217, 224	Eco-Accord	Russia
Participation in the A Joint Endocrine Society–IPEN Initiative to Raise Global Awareness about Endocrine-Disrupting Chemicals GPA items: 161-163, 188	Eco-Accord	Russia
NGO Guide to SAICM & Russian translation GPA items: 161-163, 188	Eco-Accord	Russia
Intro to Mercury Pollution and the Minamata Convention on Mercury; Russian translation GPA: 55, 161-163, 188	Eco-Accord	Russia
Central Asia & Eastern Europe Sub-Regional Workshop on the three chemical conventions and the Minamata treaty GPA items: 171-173	Eco-Accord	Russia
Awareness-Raising on Asbestos-Related Diseases in Russia GPA items: 11–20	Eco-Accord	Russia
Lead Poisoning Prevention Week of Action GPA items: 102-113, 256	Eco-Accord	Russia

Pilot project on the Development of the Inventory of Mercury Pollution Sources in the Russian Federation GPA item: 170, 245	Eco-Accord	Russia
Raising Awareness, Communication and Capacity-Building for the Final Solution of the Problem of Obsolete Pesticides in Ukraine) (2014-2016) GPA items: 102-114, 256	MAMA-86	Ukraine
Participation in the International Poll on Chemical Safety Issues (2014-2015) GPA items: 7, 85	MAMA-86	Ukraine
Synergy between Four Chemical Conventions (Stockholm, Rotterdam, Basel and Minamata conventions) and Plans in Ukraine to Promote Chemical Safety Goals GPA item: 169-171	MAMA-86	Ukraine
Public Communication of Implementation of the European Approaches to the Solution of the Problem of E-Waste in Ukraine. GPA items: 115,121, 122	MAMA-86	Ukraine

	Green Change: sustainable consumption awareness-raising campaign GPA items: 174	MAMA-86	Ukraine
Governance	Safety of Children's Toys as a National Priority, 2013 GPA items: 152, 195	Armenian Women for Health and a Healthy Environment (AWHHE)	Armenia
	Development of a National Strategy on GHS Implementation in Kyrgyzstan GPA items: 22, 99-101, 154-155, 165–168, 248-250	Independent Ecological Expertise (IEE)	Kyrgyzstan
	Contribution to development of the GEF 6 Chemical and Waste Strategy GPA items: 178, 206	Eco-Accord	Russia
	Participation in Steering Committee of UNEP Chemicals in Products Programme and Guidance GPA items: 111, 112, 127, 174	Eco-Accord	Russia
	Integration of Sound Management of Chemicals Considerations in Development Planning and Processes in Kazakhstan GPA item: 166, 183-185	Eco-Accord	Russia

	Development of a National Strategy on GHS Implementation in Tajikistan GPA items: 22, 99-101, 154-155, 165-168, 248-250	Foundation in Support of Civil Initiatives	Tajikistan
	Advocacy Work on the National Technical Regulation on Toys GPA item: 174	MAMA86	Ukraine
	Development of an Integrated National Programme for Sound Chemicals Management and SAICM in Uzbekistan GPA items: 165–167	Ecoforum Uzbekistan	Uzbekistan
Capacity Building	Strengthening Public Participation in Decision-Making on Chemicals GPA items: 170, 245	Center for Environmental Solutions	Belarus
	Educational modules on three chemical conventions and SAICM GPA items: 124,126	Greenwomen	Kazakhstan
	Educational Webinars on SAICM Emerging Policy Issues and SAICM GPA GPA items: 164, 206	Greenwomen	Kazakhstan
	Strengthening Public Participation in Decision-Making on Chemicals GPA items: 170, 245	Greenwomen	Kazakhstan

Educational trainings on GHS implementation GPA items: 124,126, 168	Independent Ecological Expertise (IEE)	Kyrgyzstan
Educational modules on three chemical conventions and SAICM GPA items: 124,126	Eco-Accord	Russia
Educational Webinars on SAICM Emerging Policy Issues and SAICM GPA GPA items: 164, 206	Eco-Accord	Russia
Strengthening Public Participation in Decision-Making on Chemicals GPA items: 170, 245	Eco-Accord	Russia
Educational modules on GHS implementation GPA items: 22, 99 – 101, 154-155, 168, 248-250	Foundation in Support of Civil Initiatives	Tajikistan

Francophone Africa

In line with the 2009-2012 findings, the 2012-2015 Citizens' Report points to the fact that countries in the region still have many challenges and priorities. However despite these challenges, chemical safety is significantly improving through the combined efforts of various stakeholders, including governments and public interest NGOs.

In general, work in Benin, Cameroon, Senegal, Burkina Faso and Mali indicates that SAICM implementation is being carried out by States with the active participation of civil society organizations. New organizations from Guinea Conakry, Togo, Cameroon and Niger have reported about various activities that fall within the objectives of SAICM (see table below). Colleagues in Togo and the Ivory Coast have considerably evolved in their efforts to assess overall implementation of SAICM in the country.

SAICM implementation has provided the opportunity for NGOs to raise and bring to the table many issues related to the problem of toxic chemicals, including lead, mercury, dioxins and furans, highly hazardous pesticides, old batteries, and chemical safety in waste management (including plastic and electronic wastes). In several countries, SAICM has actually helped create

an appropriate framework with the participation of many stakeholders (public and private services, industrial development corporations, research institutes, universities, NGOs) interested in the issue of chemicals management. Information, seminars, workshops and capacity-building sessions have allowed actors to be informed on issues and to have the tools to integrate the management of toxic chemicals and hazardous electronic waste in their various activities and partnership projects. Discussions continue to be conducted with SAICM national focal points (including personnel in Mali and Senegal in particular), through the implementation of the proposed Pesticide Action Network (PAN) Africa project funded by the SAICM Quick Start Programme.

In Cameroon, although the key sectoral ministries such as those in charge of Agriculture, Environment, Public Health and Industry, have continued to contribute significantly (through their participation in the SAICM National Coordination Committee) to the implementation of activities consistent with the objectives of SAICM, NGOs such as Centre de Recherche et d'Education pour le Développement (CREPD) have pursued activities on lead paints, mercury, and waste, and expanded the scope of work to other sources of exposures to toxic chemicals. Another NGO, Centre Optionnel pour la Promotion et la Régénération Economique et Sociale Secteur Afrique (COPRESSA), has conducted surveys and awareness raising activities on mercury, plastic waste and e-waste.

The Cameroonian government successfully completed its SAICM implementation plan in February 2014with the support of the United Nations Environment Programme (UNEP) and the United Nations Institute for Training and Research (UNITAR), and a strong contribution from CREPD in the provision of technical and scientific information, activities planning and reporting. Upon the completion of the government's SAICM Quick Start Programme (QSP) in 2014, the National Committee for the Implementation of SAICM in Cameroon was replaced by a National SAICM Coordination Committee (NSCC). The NSCC includes all key stakeholders in the management of chemicals and wastes (public and private services, relevant government ministries, industries, NGOs, research centres, universities). The National SAICM Coordination Committee is a mechanism in charge of coordinating the implementation of SAICM in Cameroon toward the 2020 goals. CREPD is member of this coordinating mechanism.

The NGO CREPD successfully completed the implementation of a SAICM project on lead paint that received an award as an Outstanding Quick Start CSO Project in Africa in 2013. The successful collaboration between northern NGOs (Occupational Knowledge International, San Francisco, USA), and southern NGOs (CREPD) during the QSP lead paint project (in line with paragraph 16n of the Overarching Policy Strategy of SAICM) is increasing and has helped to undertake many follow-up SAICM-related activities. The work on lead is being expanded to other sources, such as artisanal aluminium cookware and recycling of used lead acid batteries in both informal and formal sectors. Training of informal sector workers exposed to lead, in collaboration with Occupational Knowledge International and the Department of Chemistry, Geology & Physics at Ashland University (USA), and with support from the Maquiladora Health & Safety Support Network and the Developing World Outreach Initiative of the Northern California American Industrial Hygiene Association, has been very useful.

Since 2013, the lead paint project has also been scaled up to cover four other countries in Africa with financial support from the Global Environment Facility (GEF), executed by the United Nations Environmental Programme (UNEP) and managed by IPEN. CREPD and Jeunes Volontaires pour l'Environnement (JVE) Ivory Coast are playing the leading roles in Cameroon and Ivory Coast, respectively.

CREPD also conducted sampling of human hair using protocols developed by IPEN in 2011. The resulting study conducted in collaboration with the Biodiversity Research Institute (BRI) in USA and with financial support from IPEN, measured mercury levels in hair samples of inferred exposed populations from selected fishing communities in the Littoral of Cameroon in 2013. The results pointed to the presence of a mercury hotspot of mixed origin (waste and industrial). Data generated were used to create awareness at the national level and to inform the negotiation process of the Minamata Convention. With support from the World Alliance for Mercury-Free Dentistry (WAMFD), CREPD is shaping works for the effective implementation of the phase down of dental amalgam in Cameroon and in Africa through the African Centre for Environmental Health, which is a joint initiative between the WAMFD, CREPD and JVE Ivory Coast.

On the subject of POPs, CREPD contributed to the development of a proposal, and co-financing of the multi-partner Global Environment Facility /Food and Agriculture Organisation (FAO) - project to eliminate POPs and obsolete pesticides in Cameroon. The project has components on awareness-raising to avoid the accumulation of obsolete stocks of pesticides and promotion of alternatives to highly hazardous pesticides, which are issues of high concern under SAICM. In addition, the NGO Centre Optionnel pour la Promotion et la Régénération Economique et Sociale Secteur Afrique (COPRESSA) conducted a survey of registered pesticides sold in the city of Maroua (in the far north of Cameroon) as a contribution to the application of the FAO Code of Conduct.

COPRESSA has also conducted activities on plastic waste, medical waste, e-waste and on mercury in ASGM in a region known for its vulnerable ecosystem due to its severe climatic conditions characterized with long drought. People were informed and educated on waste minimization and the sound management of the above-mentioned categories of waste with the assistance from the company in charge of the Municipal Solid Waste Management in Cameroon (HYSACAM). Additionally, activities conducted by COPRESSA as part of the IPEN International Mercury Treaty Enabling Activities Program (IMEAP) focused on ASGM communities in Sakdjé et Mboukma helped to create awareness on mercury pollution among the miners and organized the first general assembly of the gold miners as a beginning of the formalization of ASGM in Cameroon.

In Senegal, Association pour la Défense de l'Environnement et des Consommateurs (ADEC) and Regroupement des Femmes Consuméristes contre la Féminisation de la Pauvreté (RFCP) NGOs have set up a platform of action and consultation referred to as *"Framework Representative of Consumer Organizations in Senegal"* (CROCS) with the aim to develop synergies for better protection of consumers against poor management of chemicals and wastes. The platform educates people on the whole life cycle management of chemicals commonly used by the population in Senegal including lead, mercury, EDCs, and POPs. The tools used by the Platform

in its work are international conventions on chemicals and wastes, namely, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the Stockholm Convention on Persistent Organic Pollutants (POPs), the Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol on Substances that Deplete the Ozone Layer, the Rotterdam Convention on Prior Informed Consent, SAICM and the upcoming Minamata Convention on Mercury.

In Senegal and Mali, the NGO Pesticide Action Network (PAN) Africa undertook risk reduction and capacity-building activities on pesticides. PAN analyzed the use of pesticides in Senegal and Mali during the 2003-2005 locust plague, assessed the remaining obsolete stocks, prepared and diffused briefings, held awareness-raising workshops and produced an awareness-raising video for the general public. The capacities of the communities and the civil society organizations in both countries to monitor the impacts of pesticides on health in the cotton cropping system were built through workshops and diffusion of awareness-raising materials. PAN Africa also contributed to the collection of information and the development a database on agroecology experiences in Senegal, Mali, Burkina Faso and some other countries in sub-Saharan Africa to show that agroecology is a reality in the region.

Additionally in Senegal, PAN Africa contributed to information and knowledge through the capacity-building of cotton farmers of Tambacpounda on pesticides use and non-chemical pesticide alternatives; the fight against malaria through DDT-free environmental strategies in Beer village; and the sensitization of farmers and cattle breeders on pesticides management around protected areas.

In the Ivory Coast, NGO les Jeunes Volonataires pour l'Environnement (JVE-CI) contributes significantly to the implementation of SAICM through its work on lead and mercury. As noted above, JVE is leading the implementation of the African Lead Paint Elimination Project in the Ivory Coast. The project enables the collection of data on paint marketed in the Ivory Coast, assesses the existing legal framework for chemical management, and builds capacity on lead hazards from lead in paint.

JVE-CI has also assessed the levels of mercury emissions in ASGM sites, hospitals, dental amalgam facilities, waste dumping/incineration sites and some public places in the country with support from the European Environmental Bureau (EEB). Additionally, with the support from IPEN IMEAP, JVE-CI is currently working on transitioning to mercury–free ASGM in the Ivory Coast. Dentists and small-scale gold miners are more educated about the mercury effects on health and the environment and are willing to adopt mercury-free alternatives if there is subsequent assistance for transition.

In Benin, Groupe d'Action pour la Promotion et la Protection de la Flore et la Faune (GAPROFFA) is a member of the National Committee for Management of Chemicals (CNGPC) set up within the QSP project for the implementation of SAICM in the country. GAPROFFA is currently a key implementation partner of the project entitled "*Development of an Integrated National Programme for the Sound Management of Chemicals and Supporting GHS Capacity Building in the Republic of Benin*", financed by the SAICM Quick Start Programme Trust Fund and executed by UNITAR. Also, with financial support from the World Alliance for Mercury-

Free Dentistry, GAPROFFA is working with dentists and other stakeholders (including the government ministries of health, environment and social welfare) to promote the phase down of the dental amalgam in Benin and support the early ratification of the Minamata Convention on Mercury. GAPROFFA also carried out awareness raising activities on chemical management (POPs) in the informal artisanal sector in the city of Bohiconin Benin, as well as on advocacy for the implementation of the Basel, Rotterdam and Stockholm conventions in Benin.

In Niger, the NGO *"Association Vie & Développement (Kowa-Murna)"* initiated a Galmi POPs project with the support of the GEF Small Grants Program (SGP/GEF), through which the NGO is strengthening the capacity of the farmers to reduce the risk of POPs on the environment and the health of populations of Galmi by promoting the use of registered pesticides and non-chemical alternatives like neem. This intervention has helped to slow down excessive use of pesticides in agriculture, particularly in the cultivation of onion crop, the so-called *"violet de Galmi,"* which is the main crop in the region. Most of those pesticides are obsolete pesticides according to the criteria of the FAO International Code of Pesticides Management, and are flowing into the country through smuggling. A POPs pesticide like endosulfan was commonly used by the farmers in the city of Galmi, but luckily, this is the case no more.

In Guinea Conakry, the NGO Carbone Guinée has conducted activities on the sound management of agricultural chemicals, POPs and mercury through various types of interventions and facilitation including training, information, and awareness and education programs tailored to the members of its network of actors/partners. Carbon Guinée counts among its network of partners market gardeners, commonly known as the *"Fédération des Unions Vegetable"* of Upper Guinea (FUMA / HG), whose plots (gardens) in many cases occupy the bank of water courses; this makes any chemical control of the protection of crops/harvests against natural enemies and diseases a threat to the surrounding surface water quality and its ecosystem. Specifically, 20 crop producers in the Kankan prefecture have been trained and can master the types of pesticides and fertilizer used, the benefits, the risks related to their use and the measures to protect the environment. Achievements on agricultural chemicals and POPs must be transmitted to other crop producers to ensure a better protection of health and the environment in the market gardener sector in Guinea as a main achievement of the SAICM implementation.

Carbone Guinée is currently also conducting activities on mercury to promote the implementation of the Minamata Convention in Guinea.

In Burundi, NGO Propreté, Environnement et Santé (PES) has organized awareness-raising and information-sharing workshops to promote alternatives to chemical pesticides in the country. PES successfully gathered all the key players on pesticide issues in Burundi around the same table, including representatives of public administrations (such as governmental Ministries of Environment, Agriculture and Livestock, Commerce and Public Health) and NGO representatives. As an outcome, the workshop made strong recommendations inviting the Burundian officials and all non-State actors involved to promote non-chemical alternatives to pesticides.

In Togo, with the financial support of French Embassy, the NGO Organisation Pour l'Environnement et le Développement Durable (OPED) conducted activities on waste

management that aim to protect the underground water resources from pathogenic and toxic chemicals pollutions in heavily populated areas. The project allowed OPED to significantly contribute to efforts addressing risks linked to water consumption in Cotonou by conducting awareness-raising and capacity-building activities. Still in Togo, the NGO National Consumer & Environmental Alliance of Togo (ANCE-Togo) was instrumental in work to analyse the national situation of mercury in the country after the adoption of the Minamata Convention. The project was supported by the IPEN IMEAP and gathered some quantitative data on all the sectors where mercury and mercury-containing products and waste are concerned. These data are currently used by the ministries of External Affairs and Cooperation, and the Environment and Forestry Resources to develop the *"exposé de motifs"*/rational to justify the need of timely ratification of the Minamata Convention by Togo.

In Congo, the NGO *"l'Association Congolaise pour le Développement Agricole"* (ACDA) participates in the implementation and monitoring of the Chemicals Management Plan led by the government through awareness raising activities tailoring the farmers and artisanal miners in the Mayoko District. ACDA succeed to involve the mayor and local authorities of the District in their awareness raising campaigns

Regional SAICM Implementation Activities

In May 2014, JVE-CI organized a regional workshop in Abidjan for Francophone Africa countries on dental amalgam (with support from UNEP and the World Alliance for the Mercury Free Dentistry). Participants included the representatives of governments, dentist communities, and NGOs from different countries. The workshop provided the information and knowledge on how to be successful in phasing-out the use of dental amalgam in the region and contribute to the early ratification and implementation of the Minamata Convention on mercury.

In July 2014, NGOs from Francophone Africa including CREPD, JVE-CI, PAN-Africa and GAPROFFA participated in the regional workshop for Francophone Africa on the early ratification of the Minamata Convention on mercury and the regional SAICM meeting that brought together all the stakeholders involved in mercury and SAICM process.

Gaps

Within this report period, it is noted that there are still real challenges and difficulties impeding the implementation of all five objectives of the SAICM OPS and in some countries activities are limited to only one or two objectives. The difficulties can be grouped into three main categories as follows:

1. Economic difficulties: The low level of funding and resources given despite the numerous problems identified is a very obvious problem, observe NGOs from Togo, Cameroon, Ivory Coast, Guinea and Burundi. Niger farmers cite that lack of finances often results in the purchase of smuggled or reconditioned expired pesticides; and miners in Ivory Coast confess that lack of financial assistance is a drive for the continuous use of mercury in ASGM despite the legislation that bans it.

2. Infrastructure challenges: The lack of adequate laboratories for investigation and enforcement inspections is well known. Those that exist are often under-equipped.

3. Institutional challenges: The National Commissions for Chemicals Management are struggling to function properly given the institutional problems and / or inadequate resources. For example, there are few seminars, even though NGOs active in the environmental sector want to be informed on the implementation of SAICM. In addition, there is a lack of involvement of research institutions and industrial participation in the implementation of SAICM. In Cameroon, there are deficiencies in the regulation of chemicals management that are added to a low level of enforcement of existing laws and regulations. As a result of these deficiencies on one hand, and because of ignorance of producers on the other, pesticides are circulating and large stocks are listed. Finally, producers are using them in a very inadequate way.

4. Governance challenges: Appropriate legislation, which is the key instrument to ensure the health and environmental protection goals of the sound management of chemicals, is lacking in many countries. For example, in Cameroon, even though all the national stakeholders involved in the lead paint issues recognize the urgent need of domestic regulation to control the lead hazards from lead in paints, the existing legislations in the sectoral ministries like environment and health does not allow adoption of efficient and strong regulation with the consequent enforcement mechanism. Strong laws and regulations, together with rigorous enforcement mechanisms that create a level playing field, are needed for SAICM implementation to operate effectively. Future efforts - including within the Special Programme - should be oriented to governance strengthening with the specific objective of providing countries with appropriate framework legislation for the sound management of toxic chemicals and waste and effective enforcement.

5. Reporting challenge: Many non-state actors are contributing daily to SAICM implementation in the region, but ignore or fail to report on their activities. There is a need for a significant effort to capitalize on and promote all this important work.

6. Illegal traffic: There is lack of work under this objective, though actors in many countries recognize that the chemicals of concern (POPs pesticides, mercury in ASGM, used lead acid batteries) they are using or trading are products of, or feed, an illegal traffic. There is a need of effective transboundary cooperation between countries in the region for effective SAICM implementation of this issue.

Priority emerging issues identified by NGOs in the region that require immediate action include:

1. Use of energy-saving lamps (LBC) containing mercury;
2. Use of mercury in artisanal small scale gold mining;
3. Use of cosmetic products containing toxic chemicals;
4. Use of substandard locally made aluminium cookware that leaches lead and other toxic metals (arsenic, aluminium) in food under normal cooking conditions;
5. Recycling of batteries containing lead;
6. Development of alternatives to hazardous chemicals;
7. Awareness of nanotechnology and nanomaterials;
8. Widespread use of electronic products and wastes containing lead;

9. Import, production and distribution of lead paint; and
10. Synergy of actions between NGOs and the implementation of international conventions on chemicals.

SAICM implementation by NGOs in Francophone Africa

Civil society organizations affiliated to IPEN have carried out various activities related to the national implementation of the SAICM Global Plan of Action. Below are some examples of SAICM implementation from NGOs in the region.

SAICM Objective	NGO Activity and GPA Items	Names of NGOs	Country
Risk Reduction	Targeted awareness-raising campaign on the human health effects of dental amalgam among dentists, decision-makers and the public GPA items: 54, 57, 58, 60	Groupe d'Action pour la Promotion et la Protection de la Flore et la Faune (GAPROFFA)	Benin
	Awareness-raising of actors involved in the generation of POPs and the roles of authorities in the implementation of Chemicals Conventions (Basel, Rotterdam and Stockholm) in Benin GPA items: 54	Groupe d'Action pour la Promotion et la Protection de la Flore et la Faune (GAPROFFA)	Benin
	POPs reduction among the small informal artisanal actors in Bohicon city GPA items: 54	Groupe d'Action pour la Promotion et la Protection de la Flore et la Faune (GAPROFFA)	Benin
	Data collection and development of a data base on agroecology experiences in three West African countries GPA items: 29, 31, 51	Pesticide Action Network (PAN) Africa	Burkina Faso
	Stakeholders' awareness-raising on lead paint through workshop GPA items: 2, 57	Propreté, Environnement et Santé (PES)	Burundi

	Stakeholders' awareness-raising workshop on alternatives to chemicals pesticides GPA: 51, 52, 54	Propreté, Environnement et Santé (PES)	Burundi
	Rapid assessment of the dental amalgam use among professionals in Bujumbura GPA items: 58	Propreté, Environnement et Santé (PES)	Burundi
	Production, collection and dissemination of information on the dangers of lead paint on children's health and advocacy for paint labelling and certification GPA items: 2, 57, 60	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	Assessment of lead content in artisanal aluminum cookware in Cameroon and stakeholders' awareness-raising GPA items: 2, 57, 60	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	Targeted awareness-raising campaign on the human health effects of dental amalgam among dentists, decision-makers and the public GPA items: 54, 57, 58, 60	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	Stakeholders' awareness-raising on e-waste in northern Cameroon GPA items: 54, 57, 58, 60, 71, 72	Centre Optionnel pour la Promotion et la Régénération Economique et Sociale Secteur Afrique (COPRESSA)	Cameroon
	Stakeholders' awareness-raising on plastic waste pollution in northern Cameroon	Centre Optionnel pour la Promotion et la Régénération Economique et Sociale	Cameroon

	GPA items: 54, 57, 58, 60	Secteur Afrique (COPRESSA)	
	Survey of chemicals in skin-lightening products from labelling and awareness-raising GPA items: 63, 64, 76, 77	Centre Optionnel pour la Promotion et la Régénération Economique et Sociale Secteur Afrique (COPRESSA)	Cameroon
	Mercury pollution awareness-raising among ASGM communities in Sakdjé et Mboukma villages GPA items: 54, 57, 58, 60	Centre Optionnel pour la Promotion et la Régénération Economique et Sociale Secteur Afrique (COPRESSA)	Cameroon
	Translation and dissemination of the survey questionnaire on HHPs and promotion of less toxic alternative and non-chemical alternatives GPA item: 27	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon and Multiple African countries
	Participation in the implementation and monitoring of the National Chemicals Management Plan in Congo GPA items: 56, 78	Association Congolaise pour le Développement Agricole (ACDA)	Congo
	Targeted chemical safety awareness-raising activities tailored to farmers and artisanal miners in the District of Mayoko GPA items: 51, 52, 54, 57, 58, 60	Association Congolaise pour le Développement Agricole(ACDA)	Congo
	Stakeholders awareness-raising on mercury and the Minamata Convention GPA items: 2, 57	Carbone Guinée	Guinea Conakry
	Survey on chemical pesticides and POPs pesticides uses in market	Carbone Guinée	Guinea Conakry

	gardening and pollution prevention of Niger River GPA: 51, 52, 54		
	Targeted awareness-raising campaign on the human health effects of dental amalgam among dentists, decision-makers and the public GPA items: 54, 57, 58, 60	Jeunes volontaires pour l'Environnement (JVE-CI)	Ivory Coast
	Production, collection and dissemination of information on the dangers of lead paint on children's health and advocacy for paint labelling and certification GPA items: 2, 57, 60	Jeunes volontaires pour l'Environnement (JVE-CI)	Ivory Coast
	Awareness-raising campaign on mercury used in ASGM: impacts and promotion of mercury-free techniques in ASGM GPA: 54, 57, 58, 60	Jeunes volontaires pour l'Environnement (JVE-CI)	Ivory Coast
	Analysis of the use of pesticides in Senegal and Mali during the 2003-2005 locust plagues GPA items: 23, 24	Pesticide Action Network (PAN) Africa	Mali
	Data collection and development of a data base on agroecology experiences in three West African countries GPA items: 29, 31, 51	Pesticide Action Network (PAN) Africa	Mali
	Promotion of and awareness-raising about non-chemical alternatives to chemical pesticides GPA: 51, 52, 54	Association Vie & Développement (Kowa-Murna)	Niger

	Establishment of the *"Framework Representative of Consumer Organizations in Senegal"* (CROCS) with the aim to develop synergies for better protection of consumers against poor management of chemicals and wastes GPA: 56, 57, 70, 71, 72	Association pour la Défense de l'Environnement et des Consommateurs (ADEC)	Senegal
	Establishment of the *"Framework Representative of Consumer Organizations in Senegal"* (CROCS) with the aim to develop synergies for better protection of consumers against poor management of chemicals and wastes GPA: 56, 57, 70, 71, 72	Regroupement des Femmes Consuméristes contre la Féminisation de la Pauvreté(RFCP)	Senegal
	Analysis of the use of pesticides in Senegal and Mali during the 2003-2005 locust plagues GPA items: 23, 24	Pesticide Action Network (PAN) Africa	Senegal
	Data collection and development of a data base on agroecology experiences in three West African countries GPA items: 29, 31, 51	Pesticide Action Network (PAN) Africa	Senegal
	Sensitization of and provision of information to farmers and cattle breeders on pesticides management around protected areas in Senegal GPA items: 31	Pesticide Action Network (PAN) Africa	Senegal
	Country situation analysis on mercury and subsequent awareness-raising	National Consumer & Environmental Alliance of Togo (ANCE-Togo)	Togo

	campaigns on the effects of mercury on both health and the environment GPA items: 54, 57, 58, 60		
	Activities on waste management that aim to protect the underground water resources from pathogenic and toxic chemicals pollution in heavily populated areas GPA items: 45, 57,	Organisation Pour l'Environnement et le Développement Durable (OPED)	Togo
Knowledge and Information	Survey on producers' perceptions on the risks related to the use of mercury-containing products in Benin GPA items: 155	Groupe d'Action pour la Promotion et la Protection de la Flore et la Faune (GAPROFFA)	Benin
	Research of alternatives to chemical pesticides GPA items: 84, 114	Groupe d'Action pour la Promotion et la Protection de la Flore et la Faune (GAPROFFA)	Benin
	Sampling and testing of paints for lead concentration and dissemination of results among stakeholders, the general public, and target audience GPA items: 85, 89,112, 155	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	National Mercury Hotspots survey through the assessment of mercury concentrations in fish and human hair samples in Douala, Cameroon, and public release of findings GPA items: 85, 89,112, 155	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	Participation in National Youth Day and information sharing about lead hazards	Centre de Recherche et d'Education pour le Développement	Cameroon

	from lead in paint with kids and teachers GPA items: 150, 155	(CREPD)	
	Translation of the following booklets: *Introduction to EDCs*, updated version of *NGO Guide to SAICM*, and updated version of *NGO Guide to Mercury Pollution and the Minamata Convention on Mercury* into French GPA items: 112	IPEN Regional Hub/CREPD	Cameroon for Francophone Africa
	Translation of PAN / IPEN press release about HHPs at the SAICM OEWG2 GPA items: 114	IPEN Regional Hub/CREPD	Cameroon for Francophone Africa
	Translation, production and dissemination of brochures on Mercury Pollution and the Minamata Convention to NGOs and government GPA items: 150, 152,155	IPEN Regional Hub/CREPD	Cameroon for Francophone Africa
	Translation, production and dissemination of brochures on lead paint to NGOs and government GPA items: 150, 152,155	IPEN Regional Hub/CREPD	Cameroon for Francophone Africa
	Collection, translation and dissemination of useful chemical safety information via regional listserve to NGOs in Francophone Africa GPA items: 155	IPEN Regional Hub/CREPD	Cameroon for Francophone Africa
	Study of the typology of plastic waste from the SMW stream in Yaoundé to provide information about possible sound management	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon

	technology GPA items: 155		
	Survey on the registration status of the pesticides sold in the city of Maroua and application of the FAO Code of Conduct GPA items:114	Centre Optionnel pour la Promotion et la Régénération Economique et Sociale Secteur Afrique (COPRESSA)	Cameroon
	Demonstration of the correct use of Personal Protection Equipment (PPE)among ASGM miners GPA items: 155	Centre Optionnel pour la Promotion et la Régénération Economique et Sociale Secteur Afrique (COPRESSA)	Cameroon
	Research and dissemination of information on other sources of exposure to lead in Cameroon (artisanal aluminium cookware, calabash, LAB recycling) GPA items: 155	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	Training of metal soldering workers on lead exposure information and risk mitigation at workplace in the Byem-Assi District in Yaoundé GPA items: 138, 140, 146, 147, 148	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	Capacity-building of local communities and civil society organisations on monitoring the health impacts of pesticides among cotton farming systems in West Africa GPA items: 114, 116	Pesticide Action Network (PAN) Africa	Mali
	Capacity-building of local communities and civil society organisations on monitoring the health	Pesticide Action Network (PAN) Africa	Senegal

	impacts of pesticides among cotton farming systems in West Africa GPA items: 114, 116		
	Capacity-building of the farmers from Tambacpounda area on security measures and non-chemical pesticides GPA items: 116	Pesticide Action Network (PAN) Africa	Senegal
	Pilot project on fighting against malaria through environmental and DDT-free strategies in Beer village GPA items: 116	Pesticide Action Network (PAN) Africa	Senegal
	Information-gathering for and conception of a database on agroecology experiences in Sub-Saharan Africa GPA items: 116	Pesticide Action Network (PAN) Africa	Senegal and Multi-country
	Creation of a database on pesticide use in Francophone countries in West Africa GPA items: 114, 116	Pesticide Action Network (PAN) Africa	Senegal and Multi-country
Governance	Advocacy and lobbying activities for a national instrument to control lead in paint GPA items: 187	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	Preparation of the draft legislation to control lead in paint in Cameroon GPA items: 186, 187, 195	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	Strengthening of the National Alliance for the Elimination of Lead Paint in	Centre de Recherche et d'Education pour le Développement	Cameroon

	Cameroon through the collection and sharing of relevant information among members GPA items: 186, 187, 195	(CREPD)	
	Grouping of small scale gold miners into a formal organization as an NGO contribution to the formalisation of ASGM in Cameroon GPA items: 163, 186, 187, 195	Centre Optionnel pour la Promotion et la Régénération Economique et Sociale Secteur Afrique (COPRESSA)	Cameroon
	Review of the existing legal and regulatory framework on chemical management in general and lead paint in particular GPA items: 187	Jeunes volontaires pour l'Environnement (JVE-CI)	Ivory Coast
Capacity Building	International Workshop on the launching of the African Lead Paint Elimination project GPA items: 208	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	Seventh Meeting of the African Core Group on the Strategic Approach to International Chemicals Management GPA items: 215	Centre de Recherche et d'Education pour le Développement (CREPD)	Cameroon
	Capacity-building regional workshop on dental amalgam and information for participants on the steps toward mercury-free dentistry in Africa GPA items: 212, 216	Jeunes Volontaires pour l'Environnement (JVE) World Alliance for Mercury-Free Dentistry	Ivory Coast and Multiple Francophone Africa countries

	International Workshop on the launching of the African Lead Paint Elimination project GPA items: 208	Jeunes Volontaires pour l'Environnement (JVE)	Ivory Coast

Latin America and the Caribbean

Several countries in the region have received support from the QSP Trust Fund during this period to help advance SAICM implementation. These include projects focused on information, metals management, GHS, national governance, electronics waste management, and chemicals management more broadly. However, at five years away from reaching the 2020 goal agreed to by the governments at ICCM1 that chemicals be *"produced and used in ways that minimize significant adverse impacts on human health and the environment,"* it can be stated that today very few countries could say that they are close to reaching this goal.

Although there have been advances in some sectors and successful projects have been managed with the limited resources from the Quick Start Programme Fund (QSP) Trust Fund, very few governments have adopted SAICM as a strategic framework in the management of chemicals throughout their life cycle, which would allow them to achieve institutional mainstreaming that would permit sound intergovernmental coordination. Also, very few national action plans that contain significant actions to minimize negative impacts on human health and the environment have been created. There are also very few examples of regular citizen participation mechanisms for the application of SAICM. In spite of this, various civil society organizations, IPEN members and other networks have carried out and currently carry out research, awareness-raising and training activities related to SAICM issues in the region. A selection of these activities is offered in the table presented at the end of this text.

In general terms, the deficiencies described three years ago still prevail and the recommendations we formulated then continue to be valid.[29] On this occasion, we will comment on some aspects that in our opinion have stood out in recent years, and which have been fueled both by our participation in the SAICM's discussion meetings in the last few years and the dialogue with different IPEN members in the region regarding relevant issues.

Deficit of Institutional Mechanisms and Policies Promoting Civil Society Participation in the Management of Chemicals throughout their Life Cycle and Opportunities for Reinforcement

One of the deficits in the implementation of SAICM in the countries in the region is the lack of both regular institutional mechanisms and policies promoting effective participation of civil society that takes into account the more exposed social groups and their cultural diversity. This deficiency can be extended to the implementation of different Multilateral Environmental Agreements related to chemicals, such as the Stockholm, Rotterdam, and Basel Conventions.

[29]See *Reporte de la Aplicación de SAICM en América Latina,* RAPAM, June 2012.

Governments often complain that there is a lack of NGOs with experience in the different themes pertaining to the SAICM and management of chemicals, but most countries do very little to support institutional and economic efforts coordinated by the NGOs themselves and by academic institutions to strengthen and develop these civil society capabilities. SAICM themes are often disseminated within the circle of federal institutions in the capital city, and are not disseminated among state or local authorities. The updated edition of IPEN's *An NGO Guide to SAICM: The Strategic Approach to International Chemicals Management* was thus translated into Spanish and made available as of December2014.[30] It is necessary to print a larger number of copies for wider dissemination in the following years, and it would be useful to investigate whether it can also be translated into Portuguese (at least in an electronic version).

Paradoxically, a parallel discussion is taking place regarding the establishment of a regional instrument for the full implementation in Latin America and the Caribbean of the rights to information access, public participation and justice around environmental issues related to *Principle 10 of the Rio Declaration on Environment and Development.* ECLAC (the Economic Commission for Latin America and the Caribbean) is in charge of coordinating this effort. This regional discussion process began with the Declaration on the Implementation of Principle 10 in Latin America and the Caribbean, adopted within the framework of the Rio+20 United Nations Conference on Sustainable Development, held in June 2012.

Discussion on the Progressive Ban or Phase-out of *Highly Hazardous Pesticides*

In a regional SAICM consultation held in Mexico City from August 19 to 22 of 2013, the Latin American and Caribbean countries supported a series of recommendations related to highly hazardous pesticides (HHPs),based on an original proposal presented by RAP-AL (Red de Acción en Plaguicidas y sus Alternativas para América Latina) and IPEN members. The recommendations were: A)for the Food and Agriculture Organization (FAO) to develop a report on alternatives to HHPs, emphasizing agroecological pest management and taking into account the HHP's definition criteria established by a joint FAO/World Health Organization (WHO) expert meeting, in addition to criteria regarding endocrine disruptors and the most widely used pesticides; B) to develop a national survey on the status of the HHPs in each country related to their use, prohibition or restriction; C) to have an online information exchange center regarding the HHPs list, endocrine disruptors, the health and environmental effects, regulations and alternatives; and D) to compile case studies in which highly hazardous pesticides were successfully substituted. FAO and WHO regional representatives were present at the consultation and enthusiastically approved these recommendations. Nonetheless, only the recommendation related to the regional survey on HHPs has been partially complied with. Despite these limitations, the recommendations remain as a request from the region and assumedly will be taken into account in the joint document that WHO and FAO will draw up for the discussion on HHPs during the Fourth International Conference on Chemicals Management (ICCM4), to be held in September 2015.

The Regional SAICM Coordinating Committee in which RAPAM represents IPEN formulated a questionnaire with a list of active ingredients following the Joint Pesticide Management Meeting (JPMM) criteria, and sent it out to the countries in the region. To date, 6 countries have answered.

[30] See http://www.ipen.org/documents/ngo-guide-saicm-2014

In 2012, FAO carried out a project to create a database on pesticide management, as well as a proposal regarding the classification of highly hazardous pesticides.[31]In 2014, Honduras made a diagnosis of the HHPs registered there. In Costa Rica, a SAICM project was recently approved to search for alternatives to highly hazardous pesticides, particularly in coffee and pineapple crops. The Regional Institute of Research on Toxic Substances (Instituto Regional de Investigación en Sustancias Tóxicas/IRET) is participating in this project. The coordinator is a member of RAP-AL Costa Rica and the project, which will be carried out from May 2015 to May 2017, receives advice from PAN UK, as well as government backing.

The Pesticide Action Network (PAN) has made very sound contributions to the discussion on highly hazardous pesticides that have helped move forward in diagnosing the situation of these pesticides in the region. In addition, coordination between PAN-RAP-AL and IPEN has strengthened participation in both regional consultation meetings and the joint commentaries to the drafts made by FAO and WHO. The June 2014 edition and the updated June 2015 edition of the PAN International List of Highly Hazardous Pesticides have been translated into Spanish.[32] In Mexico, RAPAM is carrying out a national report on the situation of HHPs, following PAN criteria. Academics from different universities as well as social groups are participating in the identification of the more widely used pesticides and their impact on the environment and public health in different places in Mexico.

Campaigns for the prohibition of glyphosate are currently being carried out in Argentina,[33] Chile[34] and Mexico. These campaigns are linked to criticism of the use of this herbicide with genetically modified crops. At a regional level, Brazil is notable for its proposal to create a National Program to Reduce Agrotoxics, which represents an opportunity to move forward with SAICM's priorities regarding the prohibition of highly hazardous pesticides, as no mention is made of SAICM in the Program's official document.[35]

Nanotechnology

The Latin American Network of Nanotechnology and Society (Red Latinoamericana de Nanotecnología y Sociedad/ReLANS) is the most active network working on this issue. It has members in 11 countries, including academics from different universities as well as unions.[36] From 2013 to 2015, different activities have been carried out in the region, including regional and international seminars on aspects related to employment, health and the environment. The table that appears at the end of this chapter presents a summary of these activities. ReLANs, together with other IPEN members, has participated in the co-authorship of two brochures on the Social and Environmental Implications of the Development of Nanotechnologies in Africa and the Asian-Pacific region. ReLANS has been collaborating with the Center for Nanotechnology in

[31] AlterVida, pertaining to RAPAL Paraguay, as well as an IPEN member participated in this project.
[32] See RAPAM's website: http://www.rapam.org/main_page.html as well as RAP-AL's http://www.rap-al.org/index.php?seccion=8&f=news_view.php&id=653
[33] See the collective lawsuit vs. glyphosate http://millonescontramonsanto.org/la-justicia-ordeno-al-ejecutivo-nacional-suspender-la-venta-de-transgenicos-y-agrotoxicos-asociados/
[34] See in Chile http://www.rap-al.org/index.php?seccion=8&f=news_view.php&id=650
[35] See http://www.agroecologia.org.br/index.php/publicacoes/outras-publicacoes/outras-publicacoes/proposta-pronara-programa-nacional-de-reducao-de-agrotoxicos-desenvolvido-pelo-gt-agrotoxicos-cnapo/detail
[36] See http://www.relans.org/inicio.html ReLANS is administered binationally with a coordination in Curitiba, Brazil and another one in Mexico, at the Zacatecas Autonomous University (Universidad Autónoma de Zacatecas).

Society at the University of California-Santa Barbara in various research projects. From 2013 to 2015, ReLANS participated in a project called *NMP-DeLA - Nanosciences, Nanotechnologies, Materials and New Production Technologies Deployment in Latin American Countries*, under the EU 7th Framework Program (2014). The core aspect of this project is to identify nanotechnology development activities in Latin America in the areas of health, alternative energies and water purification, and to explore channels of cooperation between countries from the European Union and Latin America in areas directly related to meeting social needs. In June 2015, ReLANS launched a book entitled *Nanotecnologías en América Latina: Trabajo y Regulación* (which translates as *Nanotechnologies in Latin America: Labor and Regulation*). It was published in Mexico with the purpose of offering inputs to the discussion.[37]

According to ReLANS, since 2014 some Latin American countries started to create working groups and discuss nanotechnology regulation. For this purpose, Brazil has incorporated a working group that is coordinated by the Micro and Nanotechnology Coordination, pertaining to the Ministry of Science, Technology and Innovation. Mexico has set up a working group coordinated by the National Metrology Center (Centro Nacional de Metrología/CENAM) pertaining to the Mexican Department of Economy. Cuba and Venezuela have conducted bilateral meetings to discuss the issue. The Nano Network from Colombia (Red Nano Colombia) has chosen regulation as one of its priorities. Despite representing first steps, the participation of social organizations in the public discussion of these topics might be of crucial importance to tip the scales toward positions defending both workers and consumers.[38] Other organizations, such as RAP-AL Uruguay, have also developed collaboration activities with UITA (International Union on Food and Agriculture) regarding nanotechnologies and their impact on agriculture.

Endocrine Disruptors: An Emerging SAICM Policy Issue

The translation into Spanish of *"Introduction to Endocrine Disrupting Chemicals (EDCs): A Guide for Public Interest Organizations and Policy-Makers,*" written by the Endocrine Society in collaboration with IPEN, appeared in 2015.[39] Although this important document has been warmly welcomed, it requires follow-up through webinars and other dissemination, discussion and training activities among IPEN member organizations, with participation of medical experts and health care workers in the region. This will give rise to a debate on this theme, its repercussions on the changes needed for the evaluation and regulation of chemical products suspect of disrupting the endocrine system, and the need to reform conventional risk evaluation methods.

Mercury and the Minamata Convention: Opportunities and Challenges in the Region

In October 2014, the report *Global Mercury Hotspots* was updated (the original report,. coordinated by IPEN and Biodiversity Research Institute (BRI),was released in 2013). The report includes data from hair and fish that were sampled for mercury, and contains results from Mexico and Uruguay. Uruguay had the highest average mercury level from all the 20 fish sampled in the global report.

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[37]Foladori, Guillermo; Anwar Hasmy, Noela Invernizzi and Edgar Záyago Lau (coordinators).*Nanotecnologías en América Latina: Trabajo y Regulación*. Ed. Porrúa. ReLANS, Universidad Autónoma de Zacatecas, Mexico, June 2015.

[38] Personal communication with Guillermo Foladori, ReLANS co-coordinator, July 2, 2015.

[39] See http://www.ipen.org/documents/introduction-endocrine-disrupting-chemicals-edcs

"*An NGO Introduction to Mercury Pollution and the Minamata Convention on Mercury"*[40]was translated into Spanish in 2014, and has been disseminated ever since. IPEN also launched the International Mercury Treaty Enabling Activities Program (IMEAP) through which small projects have been receiving support in the region throughout 2014 and 2015. The table appearing at the end of this report presents the projects implemented or underway in Argentina, Uruguay, Paraguay and Mexico.

The case of Paraguay is worth noting. Altervida NGO reached an agreement with the authorities to carry out an information campaign in the capital city aimed at consumers and companies regarding the risks of the breakage of light bulbs and lamps with a low content of mercury, and the need for sound management of these materials. The passing of legislation that extends the responsibility of manufacturers and distributors of mercury-added products, i.e., Extended Producer Responsibility (EPR) still needs to be promoted in Paraguay and other countries in the region so that they collect and pay for the treatment of mercury-containing waste and thus internalize treatment costs and move towards mercury-free products.

In the case of Mexico, the increase in mercury exports in the region should be highlighted. Given that the recycling industry in Mexico is minimal, it can be deduced that mercury basically comes from an increase in informal small-scale mining carried out in poor rural areas. Reducing the mercury supply and prohibiting primary mercury mining, as stipulated in Article 3 of the Minamata Convention, is thus challenging. If Mexico allows the market to dictate policy and waits for the deadline established by the Convention(15 years after its entry into force) in order to put an end to preexisting primary mining activity, this would imply allowing the problem to grow and both the environmental and human health damage and costs to increase. The search for sustainable local employment alternatives represents a challenge and requires that federal, state and municipal level governments become involved and carry out ongoing awareness-raising campaigns regarding human health and environmental damage resulting from exposure to and environmental release of mercury.

In the case of Argentina, a general profile of the main sources of mercury releases to the environment was created, and the case of a mercury-polluted site in Cinco Altos, Río Negro Province, where chlor-alkali and other chemicals, including PVC, used to be produced was investigated more deeply. Cleansing and compensation actions are still pending there.

Large-scale gold mining is also notorious as a source of mercury releases to the environment, as well as small-scale primary ore extraction mining, which also uses mercury. Article 12 of the Minamata Convention stipulates that governments *"shall endeavor"* to take action to address contaminated sites, meaning that they are expected to make a serious effort to action. Greater dissemination, discussion and active participation from the affected communities and civil society can help push for appropriate remediation and compensation to be carried out.

[40] See http://www.ipen.org/documents/ngo-introduction-mercury-pollution-and-minamata-convention-mercury

Other Networks

There are other networks acting in the region with which IPEN members collaborate, such as the International Labor Foundation for Sustainable Development (better known as Sustainlabor[41]) and Health Care Without Harm,[42]which have developed SAICM projects in the region. The Global Alliance for Incinerator Alternatives (GAIA[43]) is another international network, the members of which report the problems related to the expansion of cement industries in burning solid and dangerous wastes. There is also the World Alliance for Mercury-Free Dentistry, with members in the region that have promoted dissemination activities regarding the issue of mercury amalgams and the need to replace them with other alternatives, particularly in Uruguay, Paraguay, Panama, Costa Rica and Chile during these last two years in coordination with Health Care Without Harm.[44]

SAICM implementation by NGOs in Latin American and the Caribbean

Civil society organizations affiliated to IPEN have carried out various activities related to the national implementation of the SAICM Global Plan of Action. Below are some examples of SAICM implementation from NGOs in the region.

SAICM Objective	NGO Activity and Results	Names of the NGOs	Country
Risk Reduction	Air quality in the industrial corridor of greater Rosario GPA items: 43 - 44, 88-89, 192, 242	Taller Ecologista	Argentina
	Lead in paint testing and report: *Lead in Enamel Decorative Paints, a 9 Country Study.* Results were also released during activities in the 2013 International Lead Poisoning Prevention Week of Action. GPA items: 43-44, 88-89, 192 242	Taller Ecologista	Argentina
	Lead in paint testing GPA items: 43-44, 88-89, 192, 242	Observatorio Latinoamericano de Conflictos Ambientales (OLCA)	Chile

[41] See http://www.sustainlabour.org/recurso.php?lang=ES&idrecurso=842

[42] See objetives in more detail at: http://hospitalesporlasaludambiental.net

[43] See http://org2.salsalabs.com/o/1843/p/dia/action3/common/public/?action_KEY=20706 and their Facebook page: https://www.facebook.com/GAIAenespanol?ref=hl

[44] Communication with Maria Carcamo, the Alliance's Vice-President in Latin America, July 4, 2015. See http://mercury-free-dentistry.blogspot.com.es and the Alliance's Facebook page https://www.facebook.com/pages/Alianza-Mundial-por-una-Odontolog%C3%ADa-Sin-Mercurio/131015026932866

Working to reduce lead pollution from recycling lead car batteries GPA items: 1, 2, 91, 207	Fronteras Comunes	Mexico
Challenges for early ratification of the Minamata Convention in mercury supply and trade GPA items: 57, 60, 61	Red de Acción sobre Plaguicidas y Alternativas en México (RAPAM)	Mexico
Participation in data collection for measuring mercury in fish and hair samples from near the Coatzacoalcos region in Mexico (a chemical and petrochemical industry site) GPA items: 57,58, 59, 61	Red de Acción sobre Plaguicidas y Alternativas en México (RAPAM)	Mexico
Mercury in energy-saving lamps GPA items: 57-60, 154-155	Altervida	Paraguay
Mercury in dental amalgam GPA items: 57-60, 154-155	Altervida	Paraguay
Pesticide problems and transgenics in family peasant agriculture GPA items: 2-6, 154-155	Altervida	Paraguay
Lead in paint testing. Results were published in an article written by A. Scott Clark et al. Environmental Research138: 432–438 and a report was also released during activities in the 2013 International Lead Poisoning Prevention Week of Action. GPA items: 43-44, 88-89, 192, 242	Altervida	Paraguay
Collection of fish for measurement of mercury and characterization of chlor alkali site GPA items: 57,58, 59, 61	Red de Acción en Plaguicidas y sus Alternativas para América Latina (RAP-AL)	Uruguay

	Lead in paint testing and report: *Lead in Enamel Decorative Paints, a 9 Country Study.* Results were also released during activities in the 2013 International Lead Poisoning Prevention Week of Action. GPA items: 43-44, 88-89, 192	Red de Acción en Plaguicidas y sus Alternativas para América Latina (RAP-AL)	Uruguay
Knowledge and Information	Mercury national profile and a hot spot contaminated site (Cinco Saltos) GPA items: 43 - 44, 57, 88, 89, 112, 169, 192, 242	Taller Ecologista	Argentina
	Campaign to create awareness on highly hazardous pesticides, especially linked with transgenic crops GPA items: 23, 24, 25, 26, 114, 116	Centro de estudios sobre tecnologías apropiadas de la Argentina (CEETAR) / Red de Acción en Plaguicidas y sus Alternativas para América Latina (RAP-AL)	Argentina / Mexico
	Awareness-raising about the dangers of a proposed regulation on pesticides that would allow pesticides banned by international Conventions to be used GPA items: 23, 24, 25, 26, 114, 116	Centro de estudios sobre tecnologías apropiadas de la Argentina (CEETAR) / Red de Acción en Plaguicidas y sus Alternativas para América Latina (RAP-AL)	Argentina / Mexico

Seminar on Nanotechnology and Health, new challenges GPA items: 154-155 Nano appendix to Annex B activities 3, 4,5, 9	ReLANS Latin American Nanotechnology and Society Network	Brazil
Third International Seminar on Nanotechnology and Society in Latin America GPA items: 80-87; 154-155; 163-164; 181-188; 206; 257; Nano appendix to Annex B activities 1 - 12	ReLANS Latin American Nanotechnology and Society Network	Brazil
Co-author of the booklet *Social and Environmental Implications of Nanotechnology Development in Asia-Pacific*. (NTN/IPEN/ReLANS) GPA items: 154-155; 208-236; Nano appendix to Annex B activities 1 - 12	ReLANS Latin American Nanotechnology and Society Network	Brazil
International seminar on Nanotechnology and Society in Latin America: Nanotechnology and Work GPA items: 163-164; 206; Nano appendix to Annex B activities 1 - 12	ReLANS Latin American Nanotechnology and Society Network	Brazil
Co-author of the booklet *Social and Environmental Implications of Nanotechnology Development in Africa* (CSIR/IPEN/ReLANS) GPA items: 154-155; Nano appendix to Annex B activities 4,5, 9	ReLANS Latin American Nanotechnology and Society Network	Brazil
Co-author of the booklet *Social and Environmental Implications of Nanotechnology Development in Latin America & the Caribbean* (IPEN/ReLANS) GPA items: 154-155; 208-236 Nano appendix to Annex B activities 4,5, 9	ReLANS Latin American Nanotechnology and Society Network	Brazil

Published book: Perspectives on the development of nanotechnologies in Latin America (ReLANS / Ed. Porrúa) GPA items: 80-87; 154-155; Nano appendix to Annex B activities 1 - 12	ReLANS Latin American Nanotechnology and Society Network	Brazil
Public awareness on highly hazardous pesticides with a focus on neonicotinoids & glyphosate GPA items: 23, 24, 25, 26, 114, 116	Alianza por una Mejor Calidad de Vida / Red de Acción en Plaguicidas y sus Alternativas	Chile
Public awareness-raising through the Sustainable Development Network GPA items: 2, 9, 17, 43, 74	Red de Desarrollo Sostenible Colnodo	Colombia
Booklet: Toxic products at home GPA items: 44, 54, 155, 161, 163, 246	Fronteras Comunes	Mexico
Pollutant Release Transfer Inventory GPA items: 89, 124, 125, 126, 178, 179	Fronteras Comunes	Mexico
Supervision of the Spanish translation of IPEN booklets: *NGO Guide to SAICM* (updated Dec 2014); and *Introduction to Endocrine Disrupting Chemicals (EDCs): A guide for public interest organizations and policy-makers* GPA items: 87, 88, 89	Red de Acción sobre Plaguicidas y Alternativas en México (RAPAM)	Mexico
Raising public awareness on highly hazardous pesticides in Mexico (booklet and workshops) GPA items: 23, 24, 25, 26, 114, 116	Red de Acción sobre Plaguicidas y Alternativas en México (RAPAM)	Mexico

	Raising public awareness on the endosulfan ban in Mexico (booklet and presentations) GPA items: 23, 24, 25, 26, 114, 116	Red de Acción sobre Plaguicidas y Alternativas en México (RAPAM)	Mexico
	Maintenance of a pesticide list serve in Mexico GPA items: 114, 116	Red de Acción sobre Plaguicidas y Alternativas en México (RAPAM)	Mexico
	Public awareness-raising on pesticides and chemical substances and agroecological alternatives GPA items: 25, 27, 52, 81, 114, 130, 224	Unión de Científicos Comprometidos con la Sociedad (UCCS)	Mexico
	Generation of public awareness in relation to mercury associated with a chlor-alkali plant, consumer products and amalgam GPA items: 57-60, 157, 169-176	Red de Acción en Plaguicidas y sus Alternativas para América Latina (RAP-AL)	Uruguay
	Raising public awareness to phase-out mercury amalgam (in coordination with the World Alliance for Mercury Free Dentistry) GPA items: 57-60, 157, 169-176	Red de Acción en Plaguicidas y sus Alternativas para América Latina (RAP-AL)	Uruguay
	Raising public awareness on highly hazardous pesticides, specifically paraquat, atrazine, fipronil, clorpyriphos, 2.4-D, and aluminium phosphide GPA items: 2-6, 23-30, 32-42, 114-117, 154-155, 169-176	Red de Acción en Plaguicidas y sus Alternativas para América Latina (RAP-AL)	Uruguay
	Raising public awareness on nanotechnology and agriculture in coordination with UITA GPA items: 2-6, 11-21, 138-149, 169-176, 255	Red de Acción en Plaguicidas y sus Alternativas para América Latina (RAP-AL)	Uruguay

Governance	Participation in the National Profile of Chemical Substances GPA items: 1, 106, 105. 118, 146, 166, 206	Red de Desarrollo Sostenible Colnodo	Colombia
	Participation in the Resolution 2715 de 2014. *"Responsible Management of Acid and Corrosive Substances"* GPA items: 1, 70, 118	Red de Desarrollo Sostenible Colnodo	Colombia
	Participation in the Environmental Secretariat National Advisory Committee on Chemical Substances under Environmental Conventions, including SAICM and Minamata GPA items: 195, 206, 267	Red de Acción sobre Plaguicidas y Alternativas en México (RAPAM)	Mexico
	Participation in the Environmental Secretariat National Advisory Committee on Chemical Substances under Environmental Conventions, including SAICM GPA items: 195, 206, 267	Unión de Científicos Comprometidos con la Sociedad (UCCS)	Mexico
	Participation in the National Agreement on Chemical Substances coordinated by Semarnat GPA items: 195, 196	Unión de Científicos Comprometidos con la Sociedad (UCCS)	Mexico
	Participation in the elaboration of the Standard on PCB management and disposal GPA items: 55, 56, 68, 69	Unión de Científicos Comprometidos con la Sociedad (UCCS)	Mexico
Capacity building	Workshop on Nanotechnology Applications in Water & Alternative Energy GPA items: 43-46; 118; 238-242	ReLANS Latin American Nanotechnology and Society Network	Brazil

Middle East

The Arab region is comprised of 23 countries with a population of about 381 million people more than 50% of which are under the age of 25. This raises particular chemical safety concerns for women of reproductive age. Most of the countries in this region have ratified the Basel, Stockholm and Rotterdam Conventions, and are signatories to SAICM. Therefore most countries in the region are aware of the dangers of toxic substances and materials and should try to regulate and ban their use. Environmental protection has become an increasingly important item on the social and economic policy agenda of Middle East nations. Legislation addressing chemicals is already present across the region in different instruments but much work is still required for them to be sufficient and efficient.

Most Arab countries share a number of common problems including increased pest resistance and extensive use of pesticides in agriculture, intensive industrialization; and difficulties with management of hazardous wastes and toxic chemicals. The Arab region holds the world's largest reserves of crude oil and is also the largest producer of this fossil fuel. In August, Islamic environmental and religious leaders called on rich countries and oil producing nations to end fossil fuel use by 2050, which will have interesting implications for chemical safety across the region.

In some countries in the region, there have been greater opportunities and expanding roles for civil society, based on mutual accountability between the State and its citizens. However, other countries maintain an unfavorable climate for NGO activities. In general, the region supports involvement of NGOs in SAICM implementation, but NGOs in the region need more coordination and financial support. The creation of a dialogue in the public sphere and a partnership between the various segments should be taken into consideration. For example, the NGO AEEFG in Tunisia does not have much contact with their SAICM Focal Point; however, the SAICM Focal Point does support the AEEFG's interventions in a national Pesticides Committee that they both participate in.

Although many NGOs in the region contribute to promote chemicals safety, we register many gaps that relate to:

- Chemicals being managed in a piecemeal fashion (chemicals issues are treated by different branches of the government)
- Serious lack of public awareness or involvement in SAICM national implementation
- Inadequate coordination with government work
- Insufficient/absence of financing
- Lack of access to adequate information on toxic chemicals
- Lack of adequate legislation
- Information gathering and dissemination is progressing very slowly
- Lack of capacity for implementation and enforcement
- Lack of effective education programs

In addition, in some countries civil unrest and an unstable political climate result in a very difficult working environment for NGOs.

Nonetheless, NGOs from Egypt, Jordan, Lebanon and Tunisia have carried-out many projects in regard to SAICM objectives (as follows in the table below). However, NGO capacity on chemical safety is still low in some countries.

The activities carried out by the NGOs fit the objectives of SAICM and many work areas. They concern lead, mercury, pesticides, POPs and dioxin. Some NGOs work closely with their governments in some national committees. For example, Land and Human to Advocate Progress **(**LHAP) from Jordan participates in the implementation of integrated national programs for the sound management of chemicals and Association d'Education Environnementale pour les futures Générations (AEEFG) from Tunisia is an Observer on the National Steering Committee on Harmonizing Pesticides. AEEFG has participated in eliminating some pesticides from the list by using Pesticide Action Network's criteria for highly hazardous pesticides (HHPs) and highlighting their effects on health and environment to convene the Steering Committee (the decision was taken by the national focal points from different ministries). In this regard, we can assume that NGOs are efficient in implementing SAICM objectives.

Suggested measures to improve sound chemicals management in the Arab region:

- Participation of qualified NGOs in national and strategic plans for monitoring hazardous chemicals
- Enforcement of existing laws and regulations
- Awareness-raising and education addressing the hazards of chemicals
- Promotion of the growing national interests to reduce chemicals' adverse effects on human life and their impacts on the environment
- Integrated approach to chemicals management should be adopted through the three international conventions for chemicals management; Basel, Rotterdam and Stockholm
- An efficient mechanism of information exchange and quick dissemination between all relevant stakeholders within the country should be put into place
- Information on the availability of resources funding should be made available to the public

We stress the fact that the educational sector in the region can participate to raise awareness on chemicals and their impacts. Some NGOs in the region are working very closely with students to expand the awareness in the community.

SAICM implementation by NGOs in the Middle East

Civil society organizations affiliated to IPEN have carried out various activities related to the national implementation of the SAICM Global Plan of Action. Below are some examples of SAICM implementation from NGOs in the region.

SAICM Objective	NGO Activity and Results	Names of NGOs	Country

Risk Reduction	Participation in the International Lead Poisoning Prevention Week of Action GPA items: 1, 7, 9, 112,163	JES: Jordan Environment Society	Jordan
	Implementation of project: Status of Mercury in Jordan GPA items: 57, 157	LHAP: Land and Human to Advocate Progress	Jordan
	Lead in paint testing; Results were published in an article written by A. Scott Clark et al. Environmental Research 138: 432–438 GPA items: 1, 7, 9, 112,163	IndyACT	Lebanon
	Promotion of the ratification and implementation of the Minamata Convention GPA items: 57, 157	LEF: Lebanese Environment Forum	Lebanon
	Promotion of agroecology techniques for semi-arid zones GPA items: 51, 54, 56, 112, 160	ATAE: Association Tunisienne pour l'Agriculture Environnementale	Tunisia
	Implementation of the use of micorrhiza for remediation of contaminated soils GPA items: 243	ATAE: Association Tunisienne pour l'Agriculture Environnementale	Tunisia
	Participation in a week of action on POPs GPA items: 54, 112	AEEFG: Association de l'Education Environnementale pour les Futures	Tunisia
	Participation in the International Lead Poisoning Prevention Week of Action GPA items: 1, 7, 9, 112,163	AEEFG: Association de l'Education Environnementale pour les Futures Générations	Tunisia
	Participation in data collection for Lead in enamel decorative paints: A 9-country study GPA items: 43-44, 88-89, 192 242	AEEFG: Association de l'Education Environnementale pour les Futures Générations	Tunisia

	Participation in the International Lead Poisoning Prevention Week of Action GPA items: 1, 7, 9, 112,163	APEDDUB: Association de Protection de l'Environnement et du Développement Durable de Bizerte	Tunisia
	Collaboration with Swedish Society for Nature Conservation on an survey on the use of toxic and hazardous chemicals in all national and international consumer products GPA items: 112	APEDDUB: Association de Protection de l'Environnement et du Développement Durable de Bizerte	Tunisia
	Participation in a campaign for dental amalgam phase-down in Africa GPA items: 17, 57, 163, 195	APEDDUB: Association de Protection de l'Environnement et du Développement Durable de Bizerte	Tunisia
Knowledge and Information	Organization of a workshop on mercury in amalgam GPA items: 17, 57, 163, 195	IndyACT	Lebanon
	Implementation of project: National public awareness campaign on mercury GPA items: 57, 112	IndyACT	Lebanon
	Awareness-raising and media campaign on nanotechnology issues GPA items: Nano appendix to Annex B activities 4,5, 9	IndyACT	Lebanon
	Awareness-raising and media campaign on chemicals in products issues GPA items: 2, 108, 121	IndyACT	Lebanon

Awareness-raising and media campaign on electronic and electrical waste (e-waste) issues GPA items: 71, 72, 161	IndyACT	Lebanon
Awareness-raising and media campaign on mercury pollution issues GPA items: 57, 58, 59, 112, 163	IndyACT	Lebanon
Transfer knowledge and information about mercury and raise awareness on its effects on health and the environment GPA items: 57, 58, 59, 112, 163	LEF: Lebanese Environment Forum	Lebanon
Awareness-raising of agroecology techniques and promotion of bio organic inputs GPA items: 51, 54, 56, 112, 160	ATAE: Association Tunisienne pour l'Agriculture Environnementale	Tunisia
Public awareness-raising on pesticides issues and promotion of pesticide-free agriculture GPA items: 51, 54, 56, 112, 160	ATAE: Association Tunisienne pour l'Agriculture Environnementale	Tunisia
Organization of an agriculture forum to promote sound agricultural practices GPA items: 51, 54, 56, 112, 160	ATAE: Association Tunisienne pour l'Agriculture Environnementale	Tunisia
Disseminated information about pesticide pollutants, health and the environment GPA items: 51, 54, 56, 112, 160	ATAE: Association Tunisienne pour l'Agriculture Environnementale	Tunisia
Public awareness-raising, monitoring and information-sharing on the future of agriculture GPA items: 51, 54, 56, 112, 160	ATAE: Association Tunisienne pour l'Agriculture Environnementale	Tunisia

	Awareness-raising via a project on mercury in dental amalgam GPA items: 17, 57, 163, 195	APEDDUB: Association de Protection de l'Environnement et du Développement Durable de Bizerte	Tunisia
	Awareness-raising campaign to educate pupils about the hazards of mercury to health and the environment GPA items: 57, 58, 59, 112, 163	AEEFG: Association de l'Education Environnementale pour les Futures Générations	Tunisia
	Participation in the 2015 World Social Forum and presentation on the impact of exposure to chemicals on women and children GPA items: 61, 81, 164	AEEFG: Association de l'Education Environnementale pour les Futures Générations	Tunisia
Capacity building	Cooperation with local partners from civil society for a national campaign on capacity-building and technical cooperation GPA items: 184, 197	LEF: Lebanese Environment Forum	Lebanon
	Organization of a workshop on the best practices to treat olive plants without pesticides GPA items: 51, 54, 56, 112, 160	ATAE: Association Tunisienne pour l'Agriculture Environnementale	Tunisia
	Development of research and training programs to educate students about pesticides issues GPA items: 51, 54, 56, 112, 160	ATAE: Association Tunisienne pour l'Agriculture Environnementale	Tunisia
	Workshop on the best soil practices to use for safe agriculture GPA items: 51, 54, 56, 112, 160	ATAE: Association Tunisienne pour l'Agriculture Environnementale	Tunisia

	Training, awareness-raising and education on chemicals issues in science and geology programs GPA items: 150, 154	AEEFG: Association de l'Education Environnementale pour les Futures Générations	Tunisia
	Organization of a workshop on mercury's effects on health and the environment GPA items: 57, 58, 59, 112, 163	AEEFG: Association de l'Education Environnementale pour les Futures Générations	Tunisia
Governance	Enhancement of efforts to implement and develop a framework for promoting SAICM in Arabic region GPA items: 166, 167, 169	Arab Network for Environment and Development (RAED)	Egypt
	Participation in creation of legislation to manage and monitor PCBs GPA items: 68	LHAP: Land and Human to Advocate Progress	Jordan
	Participation in the Stockholm National Implementation Plan update GPA items: 211	LHAP: Land and Human to Advocate Progress	Jordan
	Observer in the national committee of the registration system of pesticides GPA items: 31, 32, 33	AEEFG: Association de l'Education Environnementale pour les Futures Générations	Tunisia
Illegal traffic	Raising awareness with students to prevent illegal international trafficking of toxic and hazardous chemicals and to prevent Damage GPA items: 265, 266, 267, 268, 269, 272,	AEEFG: Association de l'Education Environnementale pour les Futures Générations	Tunisia

South Asia

IPEN work in the South Asian region includes Bangladesh, Pakistan, Nepal, Sri Lanka, Bhutan and India. All the countries in the region are signatories to the SAICM, thus showing their commitments towards a sound chemical safety regime by 2020.

Bangladesh is still predominately an agricultural country. Therefore the issue of chemical pesticides is a major environmental concern for the country. Apart from the chemical pesticides used in agriculture, some of the major challenges for the country are associated with mercury pollution and chemicals in products (lead in paints) and wastes, including electronic wastes. The government is committed to implement the plan of action of SAICM and is developing a blueprint that will be presented at the 4th International Conference on Chemicals Management (ICCM4) to achieve the SAICM 2020 goal. The stakeholders (including the NGOs, industries and financial institutions) will play a constructive role in implementation of the plan.

Bangladesh has a strong CSOs presence and many of these organizations are engaged on the issues of chemicals management and continue to do excellent work in this direction. The NGOs in the country are involved in various activities including creation of data, research, and mass awareness-raising and engaging the stakeholders for suitable policy changes. The NGOs have been instrumental in changing the perception of lead in paints in the country and have been able to bring the issues of e-waste and mercury to the fore, whereas the government institutions have failed to take up these issues. The Environment and Social Development Organization's (ESDO's) initiative to inventory mercury will help the national government to develop a mercury plan for the country.

In Bangladesh the relationship between NGOs and the government is encouraging. The government is opens to the NGOs' participation and provides space for them in the policy conversation. The NGOs are engaging in regulatory processes, creating national profiles, and assessing the priority needs for the country.

India is one of the fastest growing economies of the world. The rapid economic growth has posed serious threats to the environment in India; therefore it is paramount for the country to take affirmative action to achieve the SAICM 2020 goal. To achieve the sustainable development goal, the Indian government has notified relevant ministries about rules and regulations needed to minimize the impact of chemicals and waste on the environment (such as those on wastes, plastics and bisphenol A). India also signed the Mercury Treaty, which signals its commitment to deal with issues of mercury pollution in the country. While the country has enacted certain environmental regulations, the issue of compliance to these rules continues to be a major concern and the existing systems for monitoring and testing is inadequate. Similarly, expanding knowledge and investing in new technology, data and research is also lacking.

In contrast, NGOs in India have successfully pushed the issues of lead in paints, pesticides, mercury, and electronics waste to the forefront. Additionally, they have been involved in generating new data, creating mass awareness and engaging the media, and have filed public interest litigation for the better management of chemicals and waste. The NGOs' persistent efforts have resulted in a voluntary standard of 90 ppm for lead in paints, and stringent standards for mercury in compact fluorescent light bulbs (CFLs) and in health care have been set up. The

growing e-waste recycling infrastructure in the country can also be attributed to the consistent efforts of NGOs due to their work to raise the issue. Further, the role of NGOs is critical on food safety issues linked with chemicals and pesticides, and the adoption of chemical-free alternatives for agriculture.

In India, NGOs have been able to create limited space in the policy and decision-making processes pertaining to chemical safety and waste issues. Toxics Link's inclusion in the drafting committee for the new municipal waste rule headed by the Ministry of Environment, Forest and Climate Change (MOEFCC), the SAICM focal point, is an important step forward to bridge the gap between the government and NGOs. However, there is little scope for the involvement of the grassroots NGOs, which will be crucial for the ground level implementation of the rules and regulations in the country.

In Nepal, political instability has been a major hindrance to good governance in the country. However, the Nepali government has initiated certain actions towards sound chemical management in the country. The government has undertaken a project to create a national chemical profile, which is an important step to have a regime for sound chemicals management in place for the country. Nepal has also signed the Mercury Treaty and shows its commitment to deal with the mercury in the country. The notification by the Nepal government to phase-out mercury from health care instruments is a significant step in this direction.

NGOs in Nepal have played a significant role in pushing forward chemical safety issues in the country. With limited resources, NGOs have been able create new data on lead in paints and heavy metals in cosmetics and toys. Research studies have been initiated on mercury use in hospitals and CFLs. Moreover, one NGO has been able to access the QSP funds of SAICM for a project to engage the policy makers and industries for lead safe paints. The NGOs' role is also crucial to create mass awareness on cross cutting chemical safety issues of heavy metals including lead and mercury, POPs and pesticides.

The NGOs in Nepal share a cordial relationship with the government institutions and the SAICM focal point is supportive towards the NGOs in taking the chemical safety issue forward. The recent new lead standard of 90 ppm in decorative paints and the banning of asbestos by the concerned ministry of Nepal can be attributed to the role of the NGOs in the major policy decision-making process. However, in a set back to NGO participation, the NGO Center for Public Health and Environmental Development (CEPHED) has not been consulted in the formulation of the standards for chemicals in toys, in spite of the significant research studies that they have produced on the subject.

In Sri Lanka, some of the major chemical safety challenges are the issues of pesticides, lead in paints, waste management (including e-waste), persistent organic pollutants and mercury pollution. The Sri Lankan government has initiated a project to inventory polychlorinated biphenyls (PCBs) and has promulgated regulations to look into waste problems and phase-out mercury from health care instruments. However in spite of these initiatives, the political commitment to deal with chemicals and achieve the SAICM 2020 goal is very loose in the country.

The NGOs in Sri Lanka have played a critical role in taking up the issues of lead in paints and pesticides. The mandatory standard for lead in paints in Sri Lanka can be attributed to the successful push of Centre for Environmental Justice (CEJ). Now Sri Lanka is one of a very few countries in the global south that is working to phase-out lead from decorative paints. Further, the persistent campaign of NGOs to highlight a serious and alarming kidney ailment due to pesticides helped result in the ban of glyphosate in the country. The NGOs in Sri Lanka share a cordial relationship with the national government and have been invited to the policy conversations and meetings on SAICM.

Gaps

The South Asian region has witnessed high economic growth during the last few years. Though the economic growth varies from country to country, all the countries are facing similar environmental challenges due to growing economies and urbanization.

Chemical safety issues have been gaining attention in the South Asian countries in recent years; however these issues have not been prioritized by the policy makers. Some of the governments in the region received access to the QSP trust fund, but the impact of the projects is very limited and results are not visible on-the-ground. Many of the important issues have been put on the backburner due to lack of capacity and understanding, as well as prioritizing the interests of industry.

The NGOs in the region have played a crucial role in bringing about policy changes as well as catalyzing new interventions. As an example, there are substantial developments taking place on lead in paints in Bangladesh, India, Nepal and Sri Lanka due to the interventions of the NGOs. Even national governments in these countries have acknowledged the need to phase-out lead from paints. However, the success story on lead in paints is due to the adequate resources available for the NGOs to take up the issue. At the same time there are other SAICM issues like endocrine disrupting chemicals (EDCs), nanomaterials and chemicals in products that require serious attention, but limited resources act as a hindrance for NGOs to focus on the issues in a long term way. It has been experienced that the desired results can be achieved if adequate resources are available.

Another important gap for the region is the lack of data on many of the issues that relate to SAICM. The data gap has been found in the government institutional level as well as with the NGOs. Though funds are available for the government institutions, limited studies are being carried out by them on these issues. NGOs are not able to generate more data due to the lack of resources.

Another important issue for the region is the lack of active participation from the industries to move the issues forward. Though some of the countries in the region have adopted progressive legislation and have ascribed responsibility to industries via Extended Producer Responsibility (EPR), the industries have not acted as per the expectations. Sometimes the national governments are also biased towards industries, citing economic interests.

Finally, in many cases in the region, it has been witnessed that public participation in the decision-making process and consideration of NGOs' roles are keys to the success of

implementation of any chemical safety efforts. Though governments in the region are gradually acknowledging the role of the NGOs and taking their help in the policy-formulation-to-implementation process, this needs to be further strengthened for sustainable chemical safety regimes to prosper. Additionally, establishment of the direct linkage between chemical safety and health impacts is absolutely necessary and there needs to be more concerted efforts to build on this linkage. Issues of chemicals and climate change also are not understood by governments and this requires specific attention by NGOs. Further, NGOs in the region need to learn to move from confrontational approaches and engage the government machinery to get the desired results.

Specific gaps that vitally need attentions are:

1. Prioritization of chemicals issues by governments, with consideration of the environmental and health aspects.
2. Strengthening research institutions and creation of more data on chemicals issues.
3. Sufficient allocation of funds for the chemical safety issues.
4. Assigning chemical safety responsibility to relevant industries.
5. Engaging CSOs in policy formulation and implementation of projects.
6. Identification of NGOs policy and implementation gaps by NGOs and engagement of the policy makers.
7. Sustained funding for NGOs to build capacity, generate more data and raise mass awareness on chemical safety issues.

SAICM implementation by NGOs in South Asia

Civil society organizations affiliated to IPEN have carried out various activities related to the national implementation of the SAICM Global Plan of Action. Below are some examples of SAICM implementation from NGOs in the region.

SAICM Objective	NGO Activity and Results	Names of NGOs	Country
Risk Reduction	Campaign for lead-free Paints GPA items: 83, 189	Environment and Social Development Organization (ESDO)	Bangladesh
	Study on the level of toxic metals in toys and public perception in Bangladesh GPA items: 102	Environment and Social Development Organization (ESDO)	Bangladesh
	Phase-out of mercury in consumer products GPA items: 57	Environment and Social Development Organization (ESDO)	Bangladesh

Mercury management in government health care sector GPA items: 57	Guide Foundation For Development (GFFD)	India
Campaign to phase-out mercury from the health sector in Manipur GPA items: 57	Institute of Social Research and Development (ISRD)	India
Campaign to phase-out mercury from the health sector GPA items: 57, 188, 189, 258,	Toxics Link	India
Working towards the elimination of Persistent Organic Pollutants (POPs) in India GPA items: 54, 102, 216	Toxics Link	India
Phasing-out of bisphenol-A (BPA) in baby feeding bottles GPA items: 7, 54,102	Toxics Link	India
Campaign for lead safe paints in India GPA items: 57, 83, 150, 163, 188, 189, 195, 196	Toxics Link	India
Campaign for lead safe paints in Nepal GPA items: 57, 83, 188, 195, 196	Center for Public Health and Environmental Development (CEPHED)	Nepal
Strengthening mercury-free health care campaign in Nepal GPA items: 188	Center for Public Health and Environmental Development (CEPHED)	Nepal
Study of lead in cosmetics GPA items: 61, 85	Center for Public Health and Environmental Development (CEPHED)	Nepal

Study of mercury in cosmetics GPA items: 61, 85	Center for Public Health and Environmental Development (CEPHED)	Nepal
Study of lead in trinkets / jewelry GPA items: 61, 85	Center for Public Health and Environmental Development (CEPHED)	Nepal
Study of mercury and power factor of selected CFL brands from Nepalese markets GPA items: 57, 61, 89	Center for Public Health and Environmental Development (CEPHED)	Nepal
Study of heavy metals in children's toys GPA items: 61, 85	Center for Public Health and Environmental Development (CEPHED)	Nepal
Promotion of alternatives to mercury-based equipment GPA items: 57	Center for Public Health and Environmental Development (CEPHED)	Nepal
Study to understand the contamination level of pesticides GPA items: 47, 48	Center for Public Health and Environmental Development (CEPHED)	Nepal
Blood lead level testing program in Nepal GPA items: 4,7, 57,163	LEADERS (Society for Legal and Environmental Analysis and Development Research)	Nepal
Mercury-free dentistry campaign GPA items: 83, 188	LEADERS (Society for Legal and Environmental Analysis and Development Research)	Nepal

	Campaign for lead-free Paints GPA items, 83, 195, 196	Center for Environmental Justice (CEJ)	Sri Lanka
	Campaign to improve standards and norms for highly hazardous pesticides (HHPs) GPA items: 195, 196	Center for Environmental Justice (CEJ)	Sri Lanka
Knowledge and Information	Research report on *"E-waste: Bangladesh situation"* GPA items: 121	Environment and Social Development Organization (ESDO)	Bangladesh
	Study report on *"Current Status of POPs in Bangladesh"* GPA items: 85	Environment and Social Development Organization (ESDO)	Bangladesh
	Raise awareness on endocrine disrupting chemicals (EDCs) GPA items: 102	Environment and Social Development Organization (ESDO)	Bangladesh
	Awareness-raising campaign on hazardous pesticides GPA items: 27	Jagrata Juba Shangha (JJS)	Bangladesh
	Awareness-raising campaign on hazardous pesticides GPA items: 27	Royal Society for the Protection of Nature (RSPN)	Bhutan
	School awareness program on the issue of E-waste management GPA items: 258	Navjyoti Development Society	India
	Awareness program of harmful effects of highly hazardous pesticides (HHPs) GPA items: 27, 114	Paryavaraniya Vikas Kendra	India
	E-waste school awareness program GPA items: 258	Paryavaraniya Vikas Kendra	India

	Public awareness-raising on lead paint with Rotary International GPA items: 57, 81, 112,	Toxics Link	India
	Upstream and downstream management of mercury in compact fluorescent light bulbs (CFLs) GPA items: 57, 161	Toxics Link	India
	Contribution to development of *Social and Environmental Implications of Nanotechnology Development in Asia Pacific* GPA items: 154 – 155; 208 – 236 and nano GPA items 1 - 12	Thanal	India
	Awareness-raising and advocacy campaign for regulating highly hazardous pesticides GPA items: 27	Center for Public Health and Environmental Development (CEPHED)	Nepal
	Awareness- raising on POPs GPA items: 102, 216	Center for Public Health and Environmental Development (CEPHED)	Nepal
	Awareness program on harmful effects of highly hazardous pesticides GPA items: 27	Sevlanka Foundation	Sri Lanka
Governance	Campaign towards an effective implementation of E- waste rule in the country GPA items: 47, 72-73, 121, 189, 258	Toxics Link	India
Capacity Building	Environmentally sound management of E-waste in Bangladesh GPA items: 258	Environment and Social Development Organization (ESDO)	Bangladesh
	School awareness program on electronics waste management GPA items: 258	Guide Foundation For Development (GFFD)	India

	E-waste management program GPA items: 258	Institute of Social Research and Development (ISRD)	India
	E-waste management programme GPA items: 72-73, 121	Society for Direct Initiative for Social and Health Action (DISHA)	India

Southeast Asia, East Asia, and the Pacific

The Southeast Asia (SEA) and East Asia regions have very diverse economic and political spectrums. The regions are facing rapidly growing challenges in chemicals and waste management, fuelled by population growth, economic growth, urbanization, industrialization, and intensive agriculture. This leads to different types of challenges and needs with respect to sound chemicals management.

The Association of Southeast Asian Nations (ASEAN) includes ten countries with a $2.4 trillion economy and population of 626 million people that will form the ASEAN Economic Community (AEC) in 2015 — one of the largest markets in the world.

IPEN Participating Organizations in East Asia are located in three countries: China, Japan, and the Republic of Korea (ROK). These countries face common environmental issues because they share common air and waters. With the view to promoting a candid exchange of perspectives and strengthening cooperation on environmental issues not only for the region but the entire globe, the Environment Ministers of the three countries have been meeting annually at the Tripartite Environment Ministers Meeting Among China, Japan, and Korea (TEMM) since 1999. In May 2015, the representatives of the three countries signed a *"Joint Action Plan for Environmental Cooperation among China, Japan and South Korea"* (2015-2019) and the *"Joint Communiqué of the 17th Tripartite Environment Ministers Meeting among China, Japan, and South Korea."* Some projects related to the improvement of environmental cooperation and actions between the three countries have been implemented.

The Pacific Islands include 20,000 – 30,000 islands and countries in this group comprise a relatively small population but are present in an area equal to approximately 15% of the Earth's surface. The dependence on fish as a dietary source of protein makes island residents particularly vulnerable to toxic chemical and metal contaminants in fish. Although Pacific Small Island Developing States are included as the fifth sub-region in Asia-Pacific Region, some of their issues differ significantly from those of the Asian continent.[45] For example, mechanisms are needed for collection, appropriate interim storage and shipment of hazardous waste off the

[45] Pacific Small Island Developing States may be further categorized as (1) Micronesia (North-West Pacific) i.e. Palau, Marshall Islands, Federated States of Micronesia; (2) Melanesia (South-West Pacific) i.e. Solomon Islands, Papua New Guinea, Vanuatu, Fiji); and (3) Polynesia (South-East Pacific) i.e. Cook Islands, Kiribati, ,Niue, Samoa, Tonga, Tuvalu).

Islands to reputable facilities for environmentally sound disposal. Another relevant emerging issue concerns hazardous chemicals and wastes associated with metals mining in the ocean. Additional concerns in the Pacific Islands include marine pollution from hazardous waste storage, plastics and marine litter, global deposition of mercury, cruise ship waste, inappropriate use (and promotion of) incineration technology, and the largely uncontrolled use of highly hazardous pesticides.

A United Nations Environment Programme (UNEP) global mercury study (2013) stated that 39.7% (or, between 395 - 1690 tonnes) of the global mercury emissions per year was attributed to East and Southeast Asia, mainly from coal burning, ferrous- and non-ferrous (Au, Cu, Hg, Pb, Zn) metal production, cement production and artisanal and small-scale gold mining (ASGM) practices.

SAICM has been implemented and advocated for in different ways and approaches in these regions. In the last three years, SAICM implementation in this large region has been uneven and is still evolving.

Highly Hazardous Pesticides (HHPs)
While civil society (led by Pesticide Action Network (PAN) Asia-Pacific) has been advocating for the ban and elimination of highly hazardous pesticides (HHPs), several countries in the region have restricted or banned some HHPs. However, much remains to be done to enforce such directives.

Regional information-sharing on HHP bans and their rationale could be helpful to governments in the region that seek to address HHPs in their countries. Attention must be given to the registration review process to phase-out HHPs and to prevent new ones from entering the market. Also, government policies aimed at reducing HHPs should include promoting toxic-free, sustainable agriculture and providing incentives to farmers to move away from harmful chemicals. An alarming issue is the illegal movement of pesticides from manufacturing countries across the porous borders of countries that have a long tradition of sustainable agricultural practices and which do not manufacture synthetic agrochemicals. A regional mechanism could help ensure that pesticide manufacturing countries respect the pesticide bans of other countries.

Prior to the 4th Asia Pacific regional meeting on the SAICM and related workshops, IPEN and PAN Asia-Pacific raised concerns about HHPs and about pesticides as endocrine disrupting chemicals (EDCs) via two “thought starter” documents. The region raised consensus concerns about both issues reflected in the meeting report and a resolution on EDCs.

Waste Management
Similar to other regions, waste management is a key issue in Southeast and East Asia. There are increasing public and governmental concerns with POPs, metals, and other types of toxic chemicals from municipal and hazardous waste management, cement kilns, and various types of incineration, including waste-to-energy incinerators.

SAICM stakeholders anticipated these concerns when they proposed GPA item 258, which calls for implementing *“capacity building programs on waste minimization and increased resource*

efficiency, including zero waste resource management, waste prevention, substitution and toxics use reduction, to reduce the volume and toxicity of discarded materials."

Many NGOs in the SEA and East Asia regions work together to promote non-burning waste disposal for municipal wastes as well as health care facilities' wastes. Civil society also actively and vigorously promotes recycling efforts and the life-cycle approach when purchasing and using various consumer goods.

Mercury

In the last three years, along with the Mercury Treaty negotiation process, more initiatives and activities have been conducted by civil society on mercury elimination, phase-out, prohibition, and promotion of safer alternatives. Civil society has actively engaged in mercury-related policy dialogue, multi-stakeholders meetings, awareness-raising campaigns, and dissemination of findings and information about mercury (especially in the trade, artisanal and small-scale gold mining (ASGM) and health sectors). All countries in the region are signatories to the Minamata Convention on Mercury, but as of the time this report was finalized, none of the countries had yet ratified the treaty.

Several NGOs in the region are also involved in IPEN's International Mercury Treaty Enabling Activities Project (IMEAP), which supports various mercury-related projects, such as trade and supply, products and ASGM.

Lead in paint

Civil society in several Southeast Asian countries has been actively involved in advocating for the elimination of lead in paint. NGOs in Indonesia, the Philippines and Thailand have successfully conducted awareness-raising activities and policy advocacy. Some countries now have updated or new regulations regarding the lead content in decorative paints manufactured in their respective countries- an issue that was not even on the radar three years ago.

The activities have also included reaching out to small and medium enterprises as well as large manufactures of paint in the countries. Reports that have been published and extensive media coverage has helped boost the elimination of lead paint. The fact that safer alternatives and/or organic pigments are available in the market has helped speed up the industry's transformation process.

Most countries that are already involved in the elimination of lead in paint campaign included or addressed this issue in their national action plans to eliminate harmful chemicals by 2020.

Post-2015

The year 2015 marks an important milestone, as the United Nations is scheduled to finalize the Post-2015 development agenda, which aims to take a more holistic and universal approach to sustainable development. A key aspect of that agenda are the sustainable development goals (SDGs), three of which cover health, water, and sustainable consumption and production –which are all of direct relevance to chemicals and sound chemicals management. The chemicals and post-2015 development agenda has been discussed in several regional SAICM and Open Ended

Working Group (OEWG) meetings as a preparation towards the upcoming 4th International Conference on Chemicals Management (ICCM4).

NGOs have worked actively for chemical safety as an essential component of sustainable development by helping to implement SAICM in the region and working alongside impacted communities and many other sectors. Their efforts have ranged from conducting creative and evidence-based information and education activities, and sampling and data analyses to initiating chemicals policy reforms, providing policy papers, and addressing SAICM's emerging policy issues.

Gaps

Despite the continuous efforts of countries in Southeast Asia and East Asia to promote the sound management of chemicals since SAICM was adopted in 2006, gaps still remain in implementation. These gaps include:

- Insufficient financial resources to fully and effectively implement SAICM and related multilateral chemicals and environmental agreements, nationally and at the ASEAN-level;
- Lack of concrete efforts to mobilize additional resources from the chemicals industry to pay for the costs of sound chemicals management;
- Weak incorporation of the precautionary principle and other essential tools in current or emerging chemicals policies such as no data, no market, toxics use reduction, materials substitution, polluter pays and right to know, among others;
- Slow progress in the development of national chemicals profiles and frameworks for the sound management of chemicals throughout their life-cycles;
- Lack of a holistic mechanism or system for inter-agency coordination on chemicals management in terms of data collection and repository, information sharing, enforcement, compliance measures, etc.;
- Inadequate infrastructure and personnel to effectively enforce bans and/or restrictions on the trade, sale, use, and disposal of chemical substances, products, and wastes of concern, including inefficient customs control to prevent illegal traffic in dangerous and toxic goods;
- Lack of an ASEAN-level policies and corresponding cooperative plans to respect national pesticide bans and prevent transboundary movement of banned pesticides;
- Lack of robust and unified legislations, and general as well as specific regulations, to advance the goals of chemical safety and sustainable development in agriculture, industry, and commerce;
- Insufficient assessment and guidance on the use of nano materials and nanotechnology, and their impacts on human health and the environment;
- Lack of documentation on the health, environmental, and economic impacts of HHPs and other products and wastes of equivalent concern;
- Lack of clear health measures to protect vulnerable populations from the harmful exposures of heavy metals, EDCs, HHPs and other chemicals of concern;
- Ineffective policies to prevent and reduce the growing volume and toxicity of discards and establish functional systems for the environmentally-sound management of municipal solid waste, healthcare waste, and hazardous waste;

- Poor public access to essential information, such as chemicals transported, used, and stored in industrial facilities, as well as chemicals discharged from pollution sources, chemicals in products, chemicals in wastes, chemicals poisonings, etc.;
- Lack of governments effectively engaging civil society to implement SAICM, especially at the policy level;
- Lack of strong law enforcement and punishment for industries that are violating the regulations; and
- Lack of synergy and harmonization of chemicals and wastes policy frameworks with ASEAN Free Trade Area (AFTA) agreement and the Trans-Pacific Partnership.

SAICM implementation by NGOs in Southeast Asia and East Asia

Civil society organizations affiliated to IPEN have carried out various activities related to the national implementation of the SAICM Global Plan of Action. Below are some examples of SAICM implementation from NGOs in the region.

SAICM Objective	NGO Activity and Results	Names of NGOs	Country
Risk Reduction	Collaborated with the government on a megaposter on pesticide and chemical fertilizer GPA items: 52, 54	Centre d'Etude et de Developpement	Cambodia
	Conducted public awareness activities on health and environmental effects of pesticides GPA items: 27, 54, 64, 78, 88	Centre d'Etude et de Developpement	Cambodia
	Carried out community-based monitoring on the use of pesticides GPA items: 13, 23, 46	Centre d'Etude et de Developpement	Cambodia
	Organized knowledge sharing activities, trainings and demonstrations on ecological agricultural practices GPA items: 51, 54, 56, 112, 160	Centre d'Etude et de Developpement	Cambodia
	Promoted non-incineration alternatives to managing industrial, hazardous, healthcare and municipal waste GPA items: 54, 70, 258	Community Sanitation and Recycling Organization	Cambodia

Organized knowledge sharing activities, trainings and demonstrations on ecological agricultural practices GPA items: 51, 54, 56, 112, 160	Cambodian Center for Rural Development	Cambodia
Carried out community-based monitoring on the use of pesticides GPA items: 13, 23, 46	Pesticide Eco-Alternatives Center	China
Conducted public awareness activities on health and environmental effects of pesticides GPA items: 27, 54, 64, 78, 88	Pesticide Eco-Alternatives Center	China
Organized training on health and environmental risks of pesticides GPA items: 46, 112	Pesticide Eco-Alternatives Center	China
Actions for risk reduction from paraquat and endosulfan GPA items: 27	Pesticide Eco-Alternatives Center	China
Organized knowledge sharing activities, trainings and demonstrations on ecological agricultural practices, including health effects of pesticides GPA items: 51, 54, 56, 112, 160	Pesticide Eco-Alternatives Center	China
Conducted sampling of fish and hair to determine levels of mercury and encourage actions to reduce pollution GPA items: 57	Island Sustainability Alliance of the Cook Islands (ISACI)	Cook Islands
Conducted air, water, sediment, fish and/or hair sampling to determine levels of mercury in hotspots and encourage action to curb mercury pollution GPA items: 57	Balifokus	Indonesia
Mercury monitoring in artisanal small-scale gold mining hotspots GPA items: 57	Balifokus	Indonesia

Conducted paint sampling activities to know lead levels in decorative paints and organized awareness-raising activities based on the findings GPA items: 88, 89, 108, 157	Balifokus	Indonesia
Performed information, education and research activities on healthcare waste management and non-incineration alternatives GPA items: 54, 56, 70, 84, 119, 162, 258	Balifokus	Indonesia
Carried out community-based monitoring on the use of pesticides GPA items: 13, 23, 46	Gadjah Mada University	Indonesia
Promoted non-incineration alternatives to managing industrial, hazardous, healthcare and municipal waste GPA items: 54, 70, 258	Balifokus	Indonesia
Promoted non-incineration alternatives to managing industrial, hazardous, healthcare and municipal waste GPA items: 54, 70, 258	Indonesia Toxics-Free Future Network	Indonesia
Conducted public awareness activities on health and environmental effects of pesticides GPA items: 27, 54, 64, 78, 88	Gita Pertiwi	Indonesia
Carried out community-based monitoring on the use of pesticides GPA items: 13, 23, 46	Gita Pertiwi	Indonesia
Promoted non-incineration alternatives to managing industrial, hazardous, healthcare and municipal waste GPA items: 54, 70, 258	Bangon Kalikasan Movement	Indonesia
Organized knowledge sharing	Sustainable	Laos

activities, trainings and demonstrations on ecological agricultural practices, including health effects of pesticides, chemicals-free farming and benefits of organic food GPA items: 51, 54, 56, 112, 160	Agriculture and Environment Development Association	
Carried out community-based monitoring on the use of pesticides GPA items: 13, 23, 46	Sustainable Agriculture and Environment Development Association	Laos
Conducted public awareness activities on health and environmental effects of pesticides GPA items: 27, 54, 64, 78, 88	Sustainable Agriculture and Environment Development Association	Laos
Promoted non-incineration alternatives to managing industrial, hazardous, healthcare and municipal waste GPA items: 54, 70, 258	Consumers' Association of Penang	Malaysia
Promoted the phase out and ban on major chemicals of public health concern (asbestos, highly hazardous pesticides, phthalates, toxic metals etc.) GPA items: 20, 54	Consumers' Association of Penang	Malaysia
Organized knowledge sharing activities, trainings and demonstrations on ecological agricultural practices, including health effects of pesticides, chemicals-free farming and benefits of organic food GPA items: 51, 54, 56, 112, 160	Consumers' Association of Penang	Malaysia
Performed information, education and research activities on healthcare waste management and non-incineration alternatives GPA items: 54, 56, 70, 84, 119,	Consumers' Association of Penang	Malaysia

162, 258		
Organized knowledge sharing activities, trainings and demonstrations on ecological agricultural practices, including health effects of pesticides, chemicals-free farming and benefits of organic food GPA items: 51, 54, 56, 112, 160	Pesticide Action Network Asia Pacific	Malaysia
Promoted the phase out and ban on major chemicals of public health concern (asbestos, highly hazardous pesticides, phthalates, toxic metals etc.) GPA items: 20, 54	Pesticide Action Network – Asia Pacific	Malaysia
Conducted public awareness activities on health and environmental effects of pesticides GPA items: 27, 54, 64, 78, 88	Pesticide Action Network Asia Pacific	Malaysia
Actions for risk reduction from paraquat and endosulfan GPA items: 27	Pesticide Action Network-Asia Pacific	Malaysia
Organized training on health and environmental risks of pesticides GPA items: 46, 112	Pesticide Action Network Asia Pacific	Malaysia
Carried out community-based monitoring on the use of pesticides GPA items: 13, 23, 46	Tenaganita	Malaysia
Conducted public awareness activities on health and environmental effects of pesticides GPA items: 27, 54, 64, 78, 88	Tenaganita	Malaysia
Contributed to the development of a national chemicals profile GPA items: 1, 165	Ban Toxics	Philippines
Conducted air, water, sediment, fish and/or hair sampling to determine levels of mercury in hotspots and encourage action to	Ban Toxics	Philippines

curb mercury pollution GPA items: 57		
Promoted non-incineration alternatives to managing industrial, hazardous, healthcare and municipal waste GPA items: 54, 70, 258	Cavite Green Coalition	Philippines
Contributed to the development of a national chemicals profile GPA items: 1, 165	EcoWaste Coalition	Philippines
Promoted the phase out and ban on major chemicals of public health concern (asbestos, highly hazardous pesticides, phthalates, toxic metals etc.) GPA items: 20, 54	EcoWaste Coalition	Philippines
Conducted air, water, sediment, fish and/or hair sampling to determine levels of mercury in hotspots and encourage action to curb mercury pollution GPA items: 57	EcoWaste Coalition	Philippines
Conducted studies on mercury in cosmetics and personal care products such as skin whitening creams GPA items: 57	EcoWaste Coalition	Philippines
Conducted paint sampling activities to know lead levels in decorative paints and organized awareness-raising activities based on the findings GPA items: 88, 89, 108, 157	EcoWaste Coalition	Philippines
Promoted non-incineration alternatives to managing industrial, hazardous, healthcare and municipal waste GPA items: 54, 70, 258	EcoWaste Coalition	Philippines

Participated in multi-stakeholders' project to develop a national framework on chemical accident prevention and preparedness GPA items: 71	EcoWaste Coalition	Philippines
Performed information, education and research activities on healthcare waste management and non-incineration alternatives GPA items: 54, 56, 70, 84, 119, 162, 258	EcoWaste Coalition	Philippines
Conducted air, water, sediment, fish and/or hair sampling to determine levels of mercury in hotspots and encourage action to curb mercury pollution GPA items: 57	Global Alliance for Incinerator Alternatives	Philippines
Promoted non-incineration alternatives to managing industrial, hazardous, healthcare and municipal waste GPA items: 54, 70, 258	Global Alliance for Incinerator Alternatives	Philippines
Promoted non-incineration alternatives to managing industrial, hazardous, healthcare and municipal waste GPA items: 54, 70, 258	Greenpeace	Philippines
Contributed to the development of a national chemicals profile GPA items: 1, 165	Health Care Without Harm	Philippines
Conducted air, water, sediment, fish and/or hair sampling to determine levels of mercury in hotspots and encourage action to curb mercury pollution GPA items: 57	Health Care Without Harm	Philippines
Performed information, education and research activities on healthcare waste management and	Health Care Without Harm	Philippines

non-incineration alternatives GPA items: 54, 56, 70, 84, 119, 162, 258		
Promoted non-incineration alternatives to managing industrial, hazardous, healthcare and municipal waste GPA items: 54, 70, 258	Interface Development Interventions	Philippines
Promoted non-incineration alternatives to managing industrial, hazardous, healthcare and municipal waste GPA items: 54, 70, 258	Mother Earth Foundation	Philippines
Conducted public awareness activities on health and environmental effects of pesticides GPA items: 27, 54, 64, 78, 88	Pesticide Action Network Philippines	Philippines
Carried out community-based monitoring on the use of pesticides GPA items: 13, 23, 46	Pesticide Action Network-Philippines	Philippines
Organized training on health and environmental risks of pesticides GPA items: 46, 112	Pesticide Action Network-Philippines	Philippines
Organized knowledge sharing activities, trainings and demonstrations on ecological agricultural practices, including health effects of pesticides, chemicals-free farming and benefits of organic food GPA items: 51, 54, 56, 112, 160	Pesticide Action Network Philippines	Philippines
Promoted non-incineration alternatives to managing industrial, hazardous, healthcare and municipal waste GPA items: 54, 70, 258	Philippine Earth Justice Center	Philippines
Developed new guidelines for hazardous substances such as boric	OUR Network with Korean Steelworkers	Republic of Korea

acid, chlorinated paraffin, ethanol amine and alkyl phenol in metalworking fluids; in collaboration with eight manufacturers of metalworking fluids occupying 80% of the market share GPA items: 3, 6, 13, 20, 21	Union	
Conducted air, water, sediment, fish and/or hair sampling to determine levels of mercury in hotspots and encourage action to curb mercury pollution GPA items: 57	Ecological Alert and Recovery-Thailand	Thailand
Conducted studies on mercury in cosmetics and personal care products such as skin whitening creams GPA items: 57	Ecological Alert and Recovery-Thailand	Thailand
Conducted paint sampling activities to know lead levels in decorative paints and organized awareness-raising activities based on the findings GPA items: 88, 89, 108, 157	Ecological Alert and Recovery-Thailand	Thailand
Conducted heavy metals study and monitoring near hotspots (hazardous waste landfills and gold and zinc mining sites) GPA items: 57, 69, 76	Ecological Alert and Recovery-Thailand	Thailand
Promoted non-incineration alternatives to managing industrial, hazardous, healthcare and municipal waste GPA items: 54, 70, 258	Ecological Alert and Recovery – Thailand	Thailand
Carried out community-based monitoring on the use of pesticides GPA items: 13, 23, 46	Research Centre for Gender, Family and Environment in Development	Vietnam
Organized knowledge sharing	Research Centre for	Vietnam

	activities, trainings and demonstrations on ecological agricultural practices, including health effects of pesticides, chemicals-free farming and benefits of organic food GPA items: 51, 54, 56, 112, 160	Gender, Family and Environment in Development	
	Organized training on health and environmental risks of pesticides GPA items: 46, 112	Research Centre for Gender, Family and Environment in Development	Vietnam
	Conducted public awareness activities on health and environmental effects of pesticides GPA items: 27, 54, 64, 78, 88	Research Centre for Gender, Family and Environment in Development	Vietnam
Knowledge and Information	Conducted local radio shows to highlight ecological agricultural practices including bio-diversity based ecological agriculture GPA items: 159	Centre d'Etude et de Developpement	Cambodia
	Risks of paraquat were presented in Institute for the Control of Agrochemicals, Ministry of Agriculture in 2011 GPA items: 27, 119	Pesticide Eco-Alternatives Center	China
	Workshop on mercury-free health care in collaboration with Ministry of Health and medical device industry GPA items: 57, 59	Global Village of Beijing	China
	Distributed 1000 calendars with information on pesticide risk to farmers and government officials GPA items: 119, 140	Pesticide Eco-Alternatives Center	China
	Sent out 2704 short messages to farmers, consumers and partner CSOs regarding risks of endosulfan GPA items: 119, 140	Pesticide Eco-Alternatives Center	China

Held regional workshop on curriculum development for community education on pesticide risk reduction GPA items: 112	Pesticide Eco-Alternatives Center	China
Developed and distributed fact sheets and monographs on highly hazardous pesticides (endosulfan, paraquat, glyphosate, chlorpyrifos, fipronil) and safer alternatives GPA items: 81, 89, 114	Pesticide Eco-Alternatives Center	China
Contribution to development of *Social and Environmental Implications of Nanotechnology Development in Asia Pacific* GPA items: 154 – 155; 208 – 236 and nano GPA items 1 - 12	Balifokus	Indonesia
Organized sampling activities to determine the presence of harmful chemicals like toxic metals in children's products such as toys and school supplies, and conducted awareness-raising and policy activities based on data generated GPA items: 88, 150, 245	Yayasan Lembaga Konsumen Indonesia (Indonesian Consumer Association)	Indonesia
Implemented mercury inventory and mercury storage project GPA items: 57	Balifokus	Indonesia
Organized various information, education and communication activities to promote the community and consumer right to know and be protected against harmful chemicals in products, toxic releases in industrial processes and environmental pollutants from waste treatment and disposal facilities GPA items: 72, 105, 124, 147,	Consumers' Association of Penang	Malaysia

150, 161, 163, 177, 187		
Contribution to development of *Social and Environmental Implications of Nanotechnology Development in Asia Pacific* GPA items: 154 – 155; 208 – 236 and nano GPA items 1 - 12	Consumers' Association of Penang	Malaysia
Developed and distributed fact sheets and monographs on highly hazardous pesticides (endosulfan, paraquat, glyphosate, chlorpyrifos, fipronil) and safer alternatives GPA items: 81, 89, 114	Pesticide Action Network Asia Pacific	Malaysia
Contribution to development of *Social and Environmental Implications of Nanotechnology Development in Asia Pacific* GPA items: 154 – 155; 208 – 236 and nano GPA items 1 - 12	Pesticide Action Network Asia Pacific	Malaysia
Organized activities with consumer brigades, school consumers /nature/ environment clubs to promote consumer information and education GPA items: 112	Consumers' Association of Penang	Malaysia
Contributed to the Report by the Special Rapporteur to Right to Health GPA items: 149	Pesticide Action Network Asia Pacific	Malaysia
Monitored compliance of FAO Code of Conduct in pesticide retail shops GPA items: 23	Pesticide Action Network Philippines	Philippines
Organized various information, education and communication activities to promote the community and consumer right to know and be protected against harmful chemicals in products,	EcoWaste Coalition	Philippines

toxic releases in industrial processes and environmental pollutants from waste treatment and disposal facilities GPA items: 72, 105, 124, 147, 150, 161, 163, 177, 187		
Organized various information, education and communication activities to promote the community and consumer right to know and be protected against harmful chemicals in products, toxic releases in industrial processes and environmental pollutants from waste treatment and disposal facilities GPA items: 72, 105, 124, 147, 150, 161, 163, 177, 187	Greenpeace Philippines	Philippines
Organized sampling activities to determine the presence of harmful chemicals like toxic metals in children's products such as toys and school supplies, and conducted awareness-raising and policy activities based on data generated GPA items: 88, 150, 245	EcoWaste Coalition,	Philippines
Implemented mercury inventory and mercury storage project GPA items: 57	Ban Toxics	Philippines
Implemented mercury inventory and mercury storage project GPA items: 57	Health Care Without Harm	Philippines
Developed and distributed fact sheets and monographs on highly hazardous pesticides (endosulfan, paraquat, glyphosate, chlorpyrifos, fipronil) and safer alternatives GPA items: 81, 89, 114	Pesticide Action Network Philippines	Philippines
Organized workshop series on the	EcoWaste Coalition	Philippines

precautionary principle, chemical safety and children's health GPA items: 150		
Organized public awareness-raising and media activities on the ecological management of spent mercury-containing fluorescent lamps to combat unsafe recycling and disposal GPA items: 57, 69	EcoWaste Coalition	Philippines
Investigated bisphenol A in canned foods used in Korean public schools and conducted public awareness-raising with parents GPA items: 88, 150, 245	OUR Network	Republic of Korea
Translated and published Thai version of *"In Harms' Way"* to educate Thai health professionals and public about the impact of chemicals on child development, and collected relevant reports in Thailand on chemicals and children's health GPA items: 150	Ecological Alert and Recovery-Thailand	Thailand
Co-organized with the FTA Watch a review o f the social and environmental challenges under the ASEAN Economic Community (AEC) policy, and the problems with trans-boundary transfer or trade of hazardous waste from Japan to ASEAN countries and / or from other industrial countries through the economic agreement. GPA items: 163, 164, 268, 273	Ecological Alert and Recovery-Thailand	Thailand
Initiated risk communication and conflict mediation regarding industrial pollution and community livelihood and	Ecological Alert and Recovery-Thailand	Thailand

	sustainable solutions GPA items: 105, 106, 109, 110		
	Organized various information, education and communication activities to promote the community and consumer right to know and be protected against harmful chemicals in products, toxic releases in industrial processes and environmental pollutants from waste treatment and disposal facilities GPA items: 72, 105, 124, 147, 150, 161, 163, 177, 187	Ecological Alert and Recovery-Thailand	Thailand
	Held regional workshop on curriculum development for community education on pesticide risk reduction GPA items: 112	Research Centre for Gender, Family and Environment in Development	Vietnam
	Developed and distributed fact sheets and monographs on highly hazardous pesticides (endosulfan, paraquat, glyphosate, chlorpyrifos, fipronil) and safer alternatives GPA items: 81, 89, 114	Research Centre for Gender, Family and Environment in Development	Vietnam
	Distributed 1000 calendars with information on pesticide risk to farmers and government officials GPA items: 119, 140	Research Centre for Gender, Family and Environment in Development,	Vietnam
Governance	Participated in government-initiated policy discussions on developing chemicals laws and regulations GPA items: 12	Centre d'Etude et de Developpement (CEDAC)	Cambodia
	Contributed to the development national strategy to environmentally sound management of mercury in Indonesia.	Balifokus	Indonesia

GPA items: 59, 165, 170, 176		
Participated in government-initiated policy discussions on developing chemicals laws and regulations GPA items: 12	Ban Toxics	Philippines
Participated in public hearings and technical working group meetings regarding the banning of endosulfan and policies on aerial spraying of agrochemicals GPA items: 196	EcoWaste Coalition	Philippines
Participated in public hearings and technical working group meetings regarding the banning of endosulfan and policies on aerial spraying of agrochemicals GPA items: 196	Interface Development Interventions	Philippines
Participated in public hearings and technical working group meetings regarding the banning of endosulfan and policies on aerial spraying of agrochemicals GPA items: 196	Pesticide Action Network Philippines, various community and farmer groups	Philippines
Policy interventions for the ecological management of mercury-containing lamp waste GPA items: 57, 69	EcoWaste Coalition	Philippines
Campaigned for the development and implementation of Pollutant Release and Transfer Register GPA items: 177, 178, 179	EcoWaste Coalition,	Philippines
Campaigned for the development and implementation of Pollutant Release and Transfer Register GPA items: 177, 178, 179	Greenpeace Philippines	Philippines

	Participated in the development, implementation and/or review of Stockholm Convention's National Implementation Plans (NIPs) GPA items: 206, 211	EcoWaste Coalition,	Philippines
	Participated in the development, implementation and/or review of Stockholm Convention's National Implementation Plans (NIPs) GPA items: 206, 211	PAN Philippines	Philippines
	Campaigned for the development and implementation of Pollutant Release and Transfer Register GPA items: 177, 178, 179	Ecological Alert and Recovery-Thailand	Thailand
	Filed a legal complaint in order to assert the genuine representation of the public interest in the National Hazardous Substance Commission GPA items: 164, 188	Ecological Alert and Recovery-Thailand	Thailand
Capacity Building	Conducted trainings and provided inputs and suggestions on chemical conventions addressing human and environmental impacts of pesticides GPA items: 225	Pesticide Eco-Alternatives Center	China
	Organized a survey and capacity building workshop on better management of e-wastes GPA items: 260	Institut Hijau Indonesia in cooperation with local waste recyclers in Jakarta.	Indonesia
	Carried out capacity building programs and projects on waste prevention and reduction, including zero waste resource management, sustainable consumption practices, etc. GPA items: 258	Consumers' Association of Penang	Malaysia

Conducted trainings and provided inputs and suggestions on chemical conventions addressing human and environmental impacts of pesticides GPA items: 225	Pesticide Action Network Philippines	Philippines
Provided training opportunities on hazard classification and GHS GPA items: 249	EcoWaste Coalition	Philippines
Carried out capacity building programs and projects on waste prevention and reduction, including zero waste resource management, sustainable consumption practices, etc. GPA items: 258	Cavite Green Coalition	Philippines
Carried out capacity building programs and projects on waste prevention and reduction, including zero waste resource management, sustainable consumption practices, etc. GPA items: 258	EcoWaste Coalition	Philippines
Carried out capacity building programs and projects on waste prevention and reduction, including zero waste resource management, sustainable consumption practices, etc. GPA items: 258	Mother Earth Foundation	Philippines
Conducted seminars and workshops to equip informal waste recyclers with information and knowledge on chemical hazards and basic exposure prevention tips GPA items: 260	EcoWaste Coalition and informal recyclers' groups	Philippines

	Launched E-Waste Action Now, produced e-waste advocacy documentary and conducted awareness raising activities, including seminars and media events. GPA items: 260	Ban Toxics	Philippines
	Launched E-Waste Action Now, produced e-waste advocacy documentary and conducted awareness raising activities, including seminars and media events. GPA items: 260	EcoWaste Coalition	Philippines
	Launched E-Waste Action Now, produced e-waste advocacy documentary and conducted awareness raising activities, including seminars and media events. GPA items: 260	Greenpeace Philippines	Philippines
	Launched E-Waste Action Now, produced e-waste advocacy documentary and conducted awareness raising activities, including seminars and media events. GPA items: 260	Philippine Earth Justice Center	Philippines
	Organizing training activities on community environmental and health monitoring GPA items: 227	Ecological Alert and Recovery-Thailand	Thailand
	Conducted trainings and provided inputs and suggestions on chemical conventions addressing human and environmental impacts of pesticides GPA items: 225	Research Centre for Gender, Family and Environment in Development	Vietnam,
Illegal Traffic	Conducted a survey to assess the transboundary movement of	Centre d'Etude et de Developpement	Cambodia

	pesticides with focus on banned pesticides GPA items: 265, 266, 267, 268, 269		
	Organized policy advocacy and public pressure to repatriate the contaminated imported metal scraps from UK and the Netherlands GPA items: 268, 272, 273	Indonesia's Toxics-Free Network	Indonesia
	Raised concern, disseminated information and conducted investigative work on illegal shipment of dangerous and toxic wastes GPA items: 268, 272, 273	Balifokus	Indonesia
	Conducted a survey to assess the transboundary movement of pesticides with focus on banned pesticides GPA items: 265, 266, 267, 268, 269	Sustainable Agriculture and Environment Development Association	Laos
	Raised concern, disseminated information and conducted investigative work on illegal shipment of dangerous and toxic wastes GPA items: 268, 272, 273	Consumers' Association of Penang	Malaysia
	Conducted a survey to assess the transboundary movement of pesticides with focus on banned pesticides GPA items: 265, 266, 267, 268, 269	Pesticide Action Network Asia Pacific	Malaysia
	Promoted media efforts to alert customs authorities on possible entry of illegal products containing lead, mercury and other toxic metals	EcoWaste Coalition	Philippines

	GPA Item: 273		
	Raised concern, disseminated information and conducted investigative work on illegal shipment of dangerous and toxic wastes GPA items: 268, 272, 273	Ecological Alert and Recovery-Thailand	Thailand

SAICM in developed countries

Some developed countries appear to view SAICM as an issue only for developing and transition countries despite agreeing to the Strategic Approach in Dubai. In fact, in a number of developed countries there remain significant gaps in implementing SAICM and considerable work is still needed to achieve the SAICM goal. This appears to reflect a low political priority on SAICM implementation and few actions to ensure the implementation of the OPS and GPA in their own countries.

Many developed countries have not yet established inter- ministerial coordination committees as recommended by the SAICM agreement, and there is a serious lack of public awareness or involvement in SAICM national implementation. In many developed countries, workers and the public still cannot access adequate information on toxic chemicals, their impacts and where and how they are used. Industrial and agricultural workers in particular continue to suffer serious and irreversible impacts of toxic chemicals. Research into alternatives to chemical pesticides in agriculture is not well supported nor are there sufficient policies and programs to promote safe and effective alternatives and substitutes to persistent, bioaccumulative, and toxic substances (PBTs) as called for in the SAICM GPA. Ironically, some developed countries have some of highest levels of PBT contamination in their human populations in the world.

SAICM cannot be viewed as a process by which only developing and transition countries improve chemical management. All signatory countries of SAICM made a firm commitment in Dubai that the sound management of chemicals is essential to achieve sustainable development and that concerted actions need to be taken to reach the 2020 goal.

Civil society organizations affiliated to IPEN have carried out various activities related to the national implementation of the SAICM Global Plan of Action. Below are some examples of SAICM implementation from NGOs in developed countries.

SAICM Objective	NGO Activity and Results	Names of NGOs	Country
Risk Reduction	Worked with local communities to reduce the use of highly hazardous chemicals (including the toxic organophosphate fenthion, used on stone fruit) and pesticide mixtures. GPA items: 2, 27, 54, 114, 116, 158, 160	National Toxics Network (NTN)	Australia
	Released the report, *'Pharmaceutical Pollution in the Environment: Issues for Australia, New Zealand and Pacific Island countries,'* as well as a fact sheet warning that pharmaceutical pollution has reached alarming levels globally. GPA items: 83, 106, 109, 226	National Toxics Network (NTN)	Australia
	Participating in a project with the technical group of the Textiles Footwear Industry Association, highlighting hazardous chemicals in clothing and apparel and safer alternatives. GPA items: 108, 109, 226	National Toxics Network (NTN)	Australia
	Contribution to development of *Social and Environmental Implications of Nanotechnology Development in Asia Pacific* GPA items: 154 – 155; 208 – 236 and nano GPA items 1 - 12	National Toxics Network (NTN)	Australia
	Researched and documented hazardous chemicals in use in the health care sector, piloted substitution for them, and produced a report: "*Chemicals Substitution and Management in the Health Care Sector: A Four-Hospital, Multi-Country Project in the Philippines and Argentina*"	Health Care Without Harm	Belgium

GPA items: 83, 109		
With partner IVAM UvA BV and assistance from Gezinsbond, Pesticide Action Network Europe and ChemSec, carrying out the project *"Communicating on Substances of Very High Concern,"* which aims to develop ideas for small & medium enterprises for improving information and communication for consumers of baby and children's products, with a focus on risks for vulnerable groups. GPA items: 109, 112, 150	Women in Europe for a Common Future (WECF)	Belgium, Germany, Netherlands, Sweden
Carrying out the Program *"Nesting: Avoid hazardous substances, protect children,"* which aims to inform parents and the health sector about concrete measures to prevent exposure to harmful chemicals in the indoor environment. GPA items: 109, 112, 150	Women in Europe for a Common Future (WECF)	Estonia, Germany, Great Britain, Greece, France, Hungary, Netherlands, and Spain
With Women in Development Shkoder, Eko Forum Zenica and Journalists for Human Rights, carrying out the project *"Reducing chemicals and contamination of drinking water sources in rural communities in Bosnia-Herzegovina, FYR Macedonia and Albania"* GPA items:109	Women in Europe for a Common Future (WECF)	Germany
Contribution to development of *Social and Environmental Implications of Nanotechnology Development in Asia Pacific* GPA items: 154 – 155; 208 – 236 and nano GPA items 1 - 12	Pesticide Action Network – Aotearoa	New Zealand
Researched and published a 4-page bulletin for health care	Alaska Community Action on Toxics	United States of America

professionals entitled *Health and the Environment for Health Care Providers: Coal Mining and Public Health* GPA items: 83, 106, 109	(ACAT)	
Published an investigative report: *Coal Dust in Alaska: Hazards to Public Health* based on a year-long citizen air monitoring program. The report documents unhealthy levels of air pollution associated with a coal-loading facility in Seward, Alaska. GPA items: 83, 109	Alaska Community Action on Toxics (ACAT)	United States of America
Communication activities around state legislation, the *Toxic-Free Children's Act*, to ban the use of certain toxic flame retardants in children's products and furniture. GPA items: 83, 87, 109, 150	Alaska Community Action on Toxics (ACAT)	United States of America
Conducting a community-based research project, *Protecting the Health of Future Generations (2012-2016)*, to investigate and reduce exposures to endocrine-disrupting chemicals in two Arctic Indigenous communities. The research team published papers in peer-reviewed scientific literature, including *International Journal of Circumpolar Health; Circumpolar Health Supplement, Environmental Health Perspectives, Journal of Local and Global Health Sciences*, and *Journal of Toxicology and Environmental Health.* GPA items: 83, 87, 109	Alaska Community Action on Toxics (ACAT)	United States of America
Published *"Driving innovation - How stronger laws can help bring safer chemicals to the market"* GPA items: 83	Center for International Environmental Law (CIEL)	United States of America

	Convened a meeting of global stakeholders to develop a broad challenge to the electronics industry based on the *"Vienna recommendations"* from 2011. GPA items: 67, 141, 146, Appendix #2- 6, 8, 11, 13	International Campaign for Responsible Technology (ICRT)	United States of America
	Created *"A Challenge to the Global Electronics Industry to Adopt Safer and More Sustainable Products and Practices, and Eliminate Hazardous Chemicals, Exposures and Discharges,"* got endorsement of the Challenge by 400 groups from over 40 countries and presented it to hundreds of electronics industry representatives. GPA items: 108, 119, 140, 145, 147, 149, Appendix #2- 6, 7, 13	International Campaign for Responsible Technology (ICRT)	United States of America
	Created an implementation document *"Meeting the challenge"* and presented to the IndustriALL Global Union's World Conference on ICT, Electrical & Electronics. GPA items: 108, 119, 121, 140, 145, 147, 149, Appendix #2- 6, 7, 13	International Campaign for Responsible Technology (ICRT)	United States of America
	Upon the announcement by the US Environmental Protection Agency that it is considering a ban on chlorpyrifos for agricultural use, PANNA provided technical comments during the public comment period and collected tens of thousands of signatures from health professionals and from members of the general public supporting the ban. GPA items: 114, 116, 158, 160, 164, 226	Pesticide Action Network North America (PANNA)	United States of America

Knowledge and Information	Published a technical report *"Burning waste for energy: It doesn't stack up".* GPA items: 83, 84, 109, 226	National Toxics Network (NTN)	Australia
	Joined communities across the world on the global day of action on waste incineration, and released a fact sheet *"10 Reasons Why Burning Waste for Energy is a Bad Idea."* GPA items: 73, 83, 84, 109	National Toxics Network (NTN)	Australia
	Published "*Preliminary investigations of toxicity in the Georges Bay catchment, Tasmania, Australia,"* which demonstrated adverse effects of the aerial application of pesticides in forestry activities. GPA items: 83, 87, 109, 114, 116, 158	National Toxics Network (NTN)	Australia
	Collaboration to translate CEHA's video "*Little Things Matter: The Impact of Toxins on the Developing Brain"* into multiple languages for wider impact and dissemination. GPA items: 109	Canadian Environmental Health Atlas (CEHA) and IPEN	Canada and worldwide
	With Pesticide Action Network Asia Pacific (Malaysia), BaliFokus (Indonesia), Thanal (India), National Toxics Network (Australia), and Pesticide Action Network Aotearoa (New Zealand), and as lead of the IPEN Nanotechnology Working Group, gave a presentation about regional work on nanomaterials at an information session at the 4th Asia Pacific Regional Meeting on SAICM. GPA items: Appendix #1- 4, 5, 9	Center for International Environmental Law (CIEL)	Switzerland

	With the Swedish Society for Nature Conservation (SSNC), published *"Managing the Unseen: Opportunities and challenges with nanotechnologies"* GPA items: 83, 109, Appendix#1-4, 9	Center for International Environmental Law (CIEL)	Switzerland
	With Latin American Nanotechnology and Society Network (ReLANS) (Mexico), published "*Nanotechnologia en America Latina: Trabajo y regulacion"* GPA items: 83, 109, Appendix #1-4, 5, 9	Center for International Environmental Law (CIEL)	Switzerland
	Organized an on-going teleconference seminar series as part of the Alaska Collaborative on Health and the Environment featuring leading scientific, policy, and community leaders to address environmental health and justice issues that are important to Alaska, yet have wider ramifications. GPA items: 87, 106, 109, 112, 164	Alaska Community Action on Toxics (ACAT)	United States of America
	Published "*Path to Global Chemical Safety."* GPA items: 83, 109	Center for International Environmental Law (CIEL)	United States of America
	Published "*Introduction to Endocrine Disrupting Chemicals (EDCs): A Guide for Public Interest Organizations and Policy-Makers.*" GPA items: 83, 87, 109	IPEN with The Endocrine Society	United States of America
	Published "*A Generation in Jeopardy,"* a review of the latest scientific studies linking pesticides and childhood health harms. GPA items: 83, 87, 109, 114, 116, 150, 158	Pesticide Action Network North America (PANNA)	United States of America

Governance	Carried out the project *"Child Protect-Life – Protecting Children's Health from Endocrine Disrupting Chemicals,"* which worked to speed-up implementation of EU environmental regulations with regard to the substitution of EDCs, in line with the EU 2020 goal of minimizing adverse effects of chemicals on public health. GPA items: 150, 194	Gezinsbond, Women in Europe for a Common Future (WECF) and Pesticide Action Network Europe	Belgium, Germany, Netherlands
	Carried out the project "*Reduce exposure to EDCs and advocating for better legislation,"* which aimed to protect children and pregnant women against exposure to EDCs by engaging the health sector, informing policy makers, and activating German civil society to enhance EDC policy. GPA items: 150, 187	Women in Europe for a Common Future (WECF)	Germany
	Supported UNEP in the finalization of the Legislation, Administrative Infrastructures & Recovery of Administrative Costs (LIRA) guidance and helped set up national projects of legal and institutional reform in Uganda, Zambia and Burkina Faso, as well as a regional workshop for the establishment of a road map for using LIRA for SAICM implementation. GPA items: 174, 193, 194	Center for International Environmental Law (CIEL)	Switzerland
Capacity Building	Participated in a SAICM Expert Meeting on Chemicals in Products in Beijing, China. GPA items: 206	National Toxics Network (NTN)	Australia
	Created a training syllabus: "*Chemical Safety, Substitution and Management Training for Health*	Health Care Without Harm	Belgium

Care Workers." GPA items:109		
With Latin American Nanotechnology and Society Network (ReLANS) (Mexico), released *"Social and Environmental Implications of Nanotechnology Development in Asia-Pacific"* at an information-sharing session at the4th Asia-Pacific Regional Meeting on the SAICM in Malaysia. GPA items: Appendix #1- 4, 5, 9	Center for International Environmental Law (CIEL), IPEN, and National Toxics Network	Australia and Switzerland
With Center for International Environmental Law (CIEL) and Eco-Ethics Kenya, organized and participated in a webinar on nanotechnology for students and researchers of the Pwani University in Kenya. GPA items: 87, 109, Appendix #1-4, 9	IPEN Nanotechnology Working Group	Switzerland
Organized the Norton Sound Indigenous Women's Gathering to raise capacity on issues related to military and industrial pollution. GPA items: 83, 109, 150, 164	Alaska Community Action on Toxics (ACAT)	United States of America
Conducted a college-credited *Community-Based Environmental Health Research Institute* exploring Arctic environmental contaminants that are globally transported and generated from local sources GPA items: 82, 83, 87, 109	Alaska Community Action on Toxics (ACAT)	United States of America
With partner JeunesVolontaires pour l'Environnement (JVE) (Ivory Coast), organized a Francophone Africa workshop and Francophone NGO summit in Abidjan to promote	World Alliance for Mercury-Free Dentistry	United States of America

	implementation of the Minamata Convention's amalgam phase-out measures. GPA items: 57, 84, 157, 169		
	With Sustainable Research and Action for Environmental Development (SRADev), organized a West African Summit on Phasing-Out Amalgam to promote implementation of the Minamata Convention's amalgam phase-out measures. GPA items: 57, 84, 157, 169	World Alliance for Mercury-Free Dentistry	United States of America
	With Environment and Social Development Organization (ESDO), organized a South & Southeast Asian Summit for Mercury Free Dentistry to promote implementation of the Minamata Convention's amalgam phase-out. GPA items: 57, 84, 157, 169	World Alliance for Mercury-Free Dentistry	United States of America

Conclusion

SAICM implementation by IPEN Participating Organizations increased during the time period 2012 – 2015. NGOs and CSOs have implemented over 500 activities from the local to the international level to promote chemical safety. Activities include work on all areas of the Overarching Policy Strategy; work on all the SAICM emerging policy issues; and participating actively in the negotiation and subsequent implementation of the Mercury Treaty.

SAICM implementation has advanced in the 2012 – 2015 time period but at this decisive point, SAICM needs re-commitment from its stakeholders to work towards its 2020 goal and plan for cooperation beyond 2020. SAICM implementation needs a sustainable financial mechanism and strong links to sustainable development so that it can move from enabling activities to authentic implementation. In the SAICM Dubai Declaration, governments acknowledged that public health and environmental NGOs, trade unions and other civil society organizations have made important contributions to promoting chemical safety, and they stated their intent to engage actively in partnerships with civil society in SAICM implementation. This requires financial resources to build NGO capacity and to support SAICM activities so that the commitment of civil society to chemical safety can be harnessed to support and promote SAICM's objectives in all parts of the world.

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IPEN
a toxics-free future

IPEN is a leading global network of 700 non-governmental organizations (NGOs) working in more than 100 developing countries and countries with economies in transition. IPEN works to establish and implement safe chemicals policies and practices to protect human health and the environment. It does this by building the capacity of its member organizations to implement on-the-ground activities, learn from each other's work, and work at the international level to set priorities and achieve new policies. Its mission is a toxics-free future for all.

IPEN has been engaged in the SAICM process since 2003, and its global network helped to develop the SAICM international policy framework. At its founding, in 1998, IPEN focused on advancing the development and implementation of the Stockholm Convention on persistent organic pollutants (POPs). Today, its mission also includes promoting safe chemicals management through the SAICM process (where it holds the public interest organization seat on the SAICM Bureau), halting the spread of toxic metals, and building a movement for a toxics-free future.