



GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title: Global Best Practices on Emerging Chemical Policy Issues of Concern under the Strategic Approach to International Chemicals Management (SAICM)			
Country(ies):	Global	GEF Project ID: ¹	9771
GEF Agency(ies):	UNEP (select) (select)	GEF Agency Project ID:	01571
Other Executing Partner(s):	SAICM Secretariat	Submission Date:	30 May 2018
GEF Focal Area (s):	Chemicals and Wastes	Project Duration (Months)	48
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/> Corporate Program: SGP <input type="checkbox"/>		
Name of Parent Program	NA	Agency Fee (\$)	778,050

A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in \$)	
			GEF Project Financing	Co-financing
(select) CW-1 Program 1 (select)	Countries have appropriate decision-making tools and economic approaches to promote the removal of barriers preventing the sound management of harmful chemicals and waste; Innovative technologies are successfully demonstrated, deployed and transferred	GEFTF	6,000,000	17,492,903
(select) CW-2 Program 3 (select)	Quantifiable and verifiable tonnes of POPs eliminated or reduced	GEFTF	1,000,000	2,400,000
(select) CW-2 Program 6 (select)	Capacity of LDCs and SIDS to manage harmful chemicals and waste is enhanced	GEFTF	1,190,000	1,420,000
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
Total project costs			8,190,000	21,312,903

B. PROJECT DESCRIPTION SUMMARY

¹ Project ID number remains the same as the assigned PIF number.

² When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#) and [CBIT programming directions](#).

Project Objective: Accelerate adoption of national and value chain initiatives to control Emerging Policy Issues (EPis), and contribute to the 2020 SAICM goal and 2030 Agenda for Sustainable Development

Project Components/ Programs	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Confirmed Co-financing
1. Promoting regulatory and voluntary action by government and industry to phase out lead in paint	TA	Countries legislate and implement legislation to restrict the use of lead in paint (LiP, 40 countries)	1.1 Demonstration pilots with paint manufacturers in Small and Medium Enterprises executed in eight countries 1.2 Policy support and awareness raising to generate support for local phase-out.	GEFTF	3,050,000	10,597,859
2. Lifecycle management of chemicals present in products	TA	Governments and value chain actors in the building products, toys, and electronics sectors track and manage chemicals of concern (CoC) in their products	2.1 New tools and guidance to reduce the use of CoCs in the building, electronics and toys sectors 2.2 Training and support for government and value chain actors to trial and adopt new guidance and tools	GEFTF	2,400,000	3,521,875
3. Knowledge management and stakeholder engagement	TA	A broad group of SAICM stakeholders access information and participate in communities of practice for peer-to-peer learning exchanges	3.1 Collaboration and engagement with the SDG and scientific communities to promote EPis. 3.2 Knowledge Management platform provides a repository of information and forum for exchange of scientific and policy information	GEFTF	2,000,000	4,463,169
Monitoring and evaluation	TA		4.1 Quarterly financial reports and annual progress reports monitoring status of project execution 4.2 Midterm and Terminal evaluations of project impacts shared with SAICM stakeholders	GEFTF	350,000	
Subtotal					7,800,000	18,582,903
Project Management Cost (PMC) ⁴				GEFTF	390,000	2,730,000
Total project costs					8,190,000	21,312,903

³ Financing type can be either investment or technical assistance.

⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

C. CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include evidence for co-financing for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Amount (\$)
Others	Secretariat of the Strategic Approach to International Chemical Management	In-kind	3,900,000
CSO	International POPs Elimination Network (IPEN)	Cash	2,000,000
CSO	IPEN	In-kind	2,000,000
CSO	World Health Organization (WHO)	In-kind	1,400,500
Other	American Bar Association – Rule of Law Initiative (ABA-ROLI)	In-kind	1,500,000
Government	US Environmental Protection Agency (USEPA)	In-kind	100,000
Government	USEPA	Cash	25,000
Government	Peru Ministry of Environment	In-kind	492,568
Other	Peru National Cleaner Production Centre (NCPC)	In-kind	246,000
Government	Jordan Ministry of Industry	In-kind	15,000
Other	Jordan Cleaner Production Unit	In-kind	40,000
Other	Sustainable Consumption and Production Regional Activity Centre (SCPRAC)	In-kind	120,219
Other	China NCPC	In-kind	150,000
CSO	Nigeria SRA-Dev	In-kind	5,000
CSO	Indonesia – BaliFokus	In-kind	5,000
CSO	Serbia NCPC	In-kind	30,000
Private Sector	LARPAINT Peru	In-kind	5,000
Private Sector	J&S Ferreteria (Peru)/ Universal Colours	In-kind	20,000
Private Sector	Pinturas Azteca	In-kind	83,000
Other	International Paint and Printing Ink Council (IPPIC)	In-kind	25,000
Other	Life Cycle Initiative	In-kind	350,000
Other	USEtox International Centre	In-kind	300,000
Other	Sri Lanka NCPC	In-kind	30,000
Other	Sri Lanka Green Building Council (GBC)	In-kind	40,000
Other	Basel Convention Regional Centre for Training and Technology Transfer for the Asia and Pacific Region (BCRC)	In-kind	242,100
Other	China BCRC	Cash	207,900
Other	Green Electronics Council (GEC)	In-kind	60,000
Government	Government of Colombia	In-kind	244,539
Other	International Sustainable Chemistry Collaborative Centre (ISC3)	In-kind	1,109,169
Other	OECD Environment Directorate	In-kind	514,000
Other	University of Cape Town	In-kind	30,000
CSO	International Institute for Sustainable Development (Knowledge Management Programme)	In-kind	300,000
GEF Agency	UN Environment Economy Division	Cash	1,940,080
GEF Agency	UN Environment Economy Division	In-kind	3,561,875
Other	Colombia NCPC	In-kind	200,000
Government	Ecuador Ministry of Environment	In-kind	20,953
Total Co-financing			21,312,903

D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee ^{a)} (b) ²	Total (c)=a+b
UNEP	GEF TF	Global	Chemicals and Wastes	SAICM	8,190,000	778,050	8,968,050
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
Total Grant Resources					8,190,000	778,050	8,968,050

a) Refer to the Fee Policy for GEF Partner Agencies

E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁵

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	<i>hectares</i>
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	<i>hectares</i>
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	<i>Number of freshwater basins</i>
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	<i>Percent of fisheries, by volume</i>
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both direct and indirect)	<i>metric tons</i>
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	<i>metric tons</i>
	Reduction of 1000 tons of Mercury	<i>metric tons</i>
	Phase-out of 303.44 tons of ODP (HCFC)	<i>ODP tons</i>
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	<i>Number of Countries: 40</i>
	Functional environmental information systems are established to support decision-making in at least 10 countries	<i>Number of Countries: 3</i>

B. F. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? No

(If non-grant instruments are used, provide an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/CBIT Trust Fund) in Annex D.

PART II: PROJECT JUSTIFICATION

⁵ Update the applicable indicators provided at PIF stage. Progress in programming against these targets for the projects per the Corporate Results Framework in the GEF-6 Programming Directions, will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

A.1. Project Description. Elaborate on: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area⁶ strategies, with a brief description of expected outcomes and components of the project, 4) [incremental/additional cost reasoning](#) and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and [co-financing](#); 5) [global environmental benefits](#) (GEFTF) and/or [adaptation benefits](#) (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

This full size project (FSP) is submitted as a package together with the recently submitted medium-sized project (MSP) titled “Global best practices on emerging policy issues of concern under SAICM (Highly Hazardous Pesticides, Environmentally Persistent Pharmaceutical Products [EPPPs] and Endocrine Disrupting Chemicals [EDCs])”. **Together** these projects address the SAICM priority issues identified at ICCM4 and included in the GEF6 strategy.

1) Global environmental problems and/or adaptation problems

Global contaminants such as Persistent Organic Pollutants (POPs) or mercury are regulated by Multilateral Environmental Agreements (MEAs), namely the Stockholm and Minamata Conventions respectively. A number of additional ‘Emerging Policy Issues’ (EPIs) have been nominated for voluntary, cooperative risk reduction actions by countries through the Strategic Approach for International Chemicals Management (SAICM). In 2002, Governments identified the goal of “by 2020, that chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment”⁷.

This project focuses on two EPIs: Lead in Paint; and Chemicals in Products. These EPIs present particular environmental and health problems which are outlined in the following paragraphs. The project also focuses on the need for knowledge management, information exchange and strategic planning to ensure concerted and coordinated action on all EPIs.

Lead paint: Lead is a cumulative toxic element particularly harmful to young children and pregnant women. The cost of reduced cognitive potentials (measured through loss of IQ points) due to preventable childhood lead exposure in low and middle-income countries is estimated as \$977 billion annually⁸. The Institute for Health Metrics and Evaluation (IHME) has estimated that in 2015 lead exposure accounted for 494,550 deaths due to long-term effects on health, with the highest burden in low and middle-income countries. IHME also estimated that lead exposure accounted for 12.4% of the global burden of idiopathic intellectual disability, 2.5% of the global burden of ischaemic heart disease and 2.4% of the global burden of stroke⁹. Lead paint is a major source of childhood lead exposure, for example via contaminated dust in homes that can be inhaled or ingested (UNEP

⁶ For biodiversity projects, in addition to explaining the project’s consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving..

⁷ Johannesburg Plan of Implementation, paragraph 23, adopted at the World Summit on Sustainable Development

⁸ Attina and Trasande (2013) Economic Costs of Childhood Lead Exposure in Low- and Middle-Income Countries (<http://ehp.niehs.nih.gov/1206424>)

⁹ Institute for Health Metrics and Evaluation (IHME). 2015 GBD Compare. Seattle, WA: IHME, University of Washington, (<http://vizhub.healthdata.org/gbd-compare>, accessed 26 Aug 16)

2010)¹⁰. Even relatively low levels of exposure to lead can cause serious and irreversible neurological damage, there is no known safe level of lead exposure¹¹.

The cost of removing existing decorative lead paint from surfaces in homes, schools, and other buildings is significant. By contrast, the economic cost for eliminating the use of lead compounds in new decorative paints is low and alternatives to lead additives are available for all types of paints. Many manufacturers have successfully reformulated their paint products to avoid the intentional addition of lead¹². However, the continued use of lead paint around the world remains a significant source of human exposure. To protect human health laws, regulations, or enforceable standards are needed in every country to stop the manufacture and import and sale of lead containing paints and lead based pigments and other additives used in the manufacture of paints locally. Though lead-free alternatives exist, barriers to their use by the paint industry include lack of regulations, access to vendors and lack of awareness of small and medium sized manufacturers to the need for phasing out lead paint.

Chemicals in products: Chemicals that are mutagenic, carcinogenic, toxic to reproduction, endocrine disrupters (EDCs), neurotoxic, persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) may have serious and often irreversible effects on human health and the environment. Only a few of these chemicals are currently regulated or banned under the Stockholm and Minamata Conventions. These hazardous chemicals are found in consumer products all over the world, resulting in exposures by workers during manufacture¹³, by consumers during use¹⁴, by informal sectors involved in recycling and disposal with emphasis on women and children¹⁵, and to the environment via wastewater and sewage sludges¹⁶. Toxic contaminants in products can also be a barrier to a shift towards a circular economy, as shown by the example of plastic from products containing brominated flame retardants being recycled into toys, resulting in high levels (up to 1194ppm) of the new POPs PBDE and/or HBCD being detected in some cases¹⁷.

In 2017, the UN Environment Assembly proposed a science-based approach to prioritize harmful ‘hard-hitting’ pollutants. These chemicals of concern (CoC) are grouped into three categories according to the level of scientific evidence to justify interventions¹⁸ (Table 1). The first category are globally recognized hazardous

¹⁰ UNEP 2010 Final review of scientific information on lead;

http://www.unep.org/hazardoussubstances/Portals/9/Lead_Cadmium/docs/Interim_reviews/UNEP_GC26_INF_11_Add_1_Final_UNEP_Lead_review_and_appendix_Dec_2010.pdf

¹¹ UN Environment (2017), Update on the Global Status of Lead in Paint: September 2017, accessed 5 January 2018: http://wedocs.unep.org/bitstream/handle/20.500.11822/22001/Glbbal%20Update%20Final%20Version%202011_Oct.pdf?sequence=1&isAllowed=y.

¹² Ibid

¹³ <https://chemicalchallenge.org/>

¹⁴ Kuang et al (2017) Brominated flame retardants in black plastic kitchen utensils: Concentrations and human exposure implications <https://www.ncbi.nlm.nih.gov/pubmed/28847134>

¹⁵ Grant (2013) Health consequences of exposure to e-waste: a systematic review, The Lancet Global Health <https://www.sciencedirect.com/science/article/pii/S2214109X13701013>

¹⁶ Molander (2012) Are chemicals in articles an obstacle for reaching environmental goals? — Missing links in EU chemical management <https://www.ncbi.nlm.nih.gov/pubmed/22858536>

¹⁷ IPEN (2017) Toy or Toxic Waste? An analysis of 41 plastic toy and beauty products made from toxic recycling

¹⁸ UNEA 3 – Executive Directors Report <https://papersmart.unon.org/resolution/uploads/k1708347e.pdf> p51, Types of action required per category of pollutant, based on scientific evidence

chemicals for which international multilateral environmental agreements exist, including POPs, mercury and ozone depleting substances. The second category are chemicals for which scientific evidence is well established, and includes heavy metals and SAICM EPIs including lead paint, perfluorinated compounds such as PFOS, and environmentally persistent pharmaceutical products (EPPP). Many of these chemicals are known to be highly problematic and have been banned or regulated in many countries/ regions, even where a global ban is not yet in place or proposed. The third category is chemicals for which scientific evidence is still emerging such as endocrine disrupting chemicals (EDCs). Chemicals in this third category may be restricted in more developed countries/regions and by pioneering global brands, but are not widely regulated on a global level. Existing restrictions are based on hazard-based lists such as the SIN list¹⁹, the Clean Production Action’s GreenScreen List Translator, US state lists of chemicals hazardous for children²⁰, the EU REACH annexes, the Endocrine Disruption Exchange list of potential EDC, the Green Science Policy Institute ‘six classes’ approach²¹.

TABLE 1: CHEMICALS OF CONCERN WIDELY USED IN THE BUILDINGS, ELECTRONICS AND TOYS SECTORS

Sector	International pollution reduction action already agreed (MEAs)	Scientific evidence exists to advance action	Emerging scientific evidence
Buildings	POPs - Brominated flame retardants – plastics, foams; PFOS – paints, textiles; HBCD – insulation; short chain chlorinated paraffins (SCCP) – coatings, paints, cables Asbestos (ILO Asbestos Convention 1986) Mercury – lighting and switches	Lead, VOCs and vinyl chloride – coatings Other heavy metals – cadmium PFCs – paints, textiles	Methylene Diphenyl Diisocyanates
Electronics	POPs - Brominated flame retardants – plastics, foams ; PFOS – paints, textiles; HBCD – insulation; SCPP – coatings, paints, cables Mercury – switches	Additional RoHS restricted chemicals - cadmium, hexavalent chromium and flame retardants such as PBB Lead batteries PFCs – paints, textiles	Phthalates (DEHP, BBP, DBP, DIBP) Restricted substances on individual electronics company lists
Toys	POPs such as Brominated flame retardants from recycled plastic and PFOS in textile toys	Lead (jewellery, paint and batteries) Cadmium in batteries Perfluorinated chemicals – paints, textiles	EDC in plastics: Phthalates and Bisphenol A Polycyclic aromatic hydrocarbons (PAHs)

Substitution of these hazardous substances following global or national regulatory action is often difficult to implement as it is undermined by the available replacements often being CoC themselves. The easiest substitutions may be with chemically similar alternatives, however the similarity in function may be accompanied by similar hazard profiles. Such ‘regrettable substitutions’ may thus lead to comparable negative impacts or shift burden from one impact to another, requiring further action by manufacturers. Examples

¹⁹ <http://chemsec.org/business-tool/sin-list/>

²⁰ State of Vermont list of 60 chemicals of very high concern to children, http://www.healthvermont.gov/sites/default/files/documents/2016/11/Env_CDP_chemicals_high_concern_childrens_products_rule.pdf

²¹ <http://greensciencepolicy.org/topics/six-classes/> - highly fluorinated chemicals, antimicrobials, flame retardants, bisphenols and phthalates, organic solvents, and certain metals

include the replacement of brominated flame retardants (classified as POPs), with organophosphate chemicals which are suspected carcinogens (TCIPP, TBOEP), neurotoxins (TCEP, TNBP) or endocrine disruptors (TPHP, TDCPP)²². These chemicals may also present a higher exposure risk as they are present as additives in building products or electronics and are not chemically bonded into the articles as in the case of the POPs originals. The alternatives are therefore more prone to leach out of the products making them more available to enter human and environmental endpoints. Many other examples are available including the substitution of the chemical bisphenol S with bisphenol A, or the use of perfluorinated alkyl substances (PFASs) instead of perfluorooctane sulfonic acid (PFOS)²³.

Knowledge management and strategic planning: In many developing countries, there is often a limited degree of mainstreaming, political commitment and coordination between initiatives to promote sound management of chemicals, particularly in the second and third categories of Table 1, i.e. chemicals for which no legally binding MEA exists. The recent independent evaluation of SAICM activities (2006-2015) concluded that “while the identification of EPIs are generally regarded as a major success of SAICM, it is apparent that the degree of progress was not uniform across the EPIs with no common means to measure progress.”²⁴ Also according to the evaluation the slow progress in taking forward work on the EPIs is due in part to “institutional constraints facing The Inter-Organization Programme for the Sound Management of Chemicals (IOMC) organizations” that is, because SAICM is not their governing body.

Organizations and countries have nonetheless delivered numerous projects, initiatives and consultations on EPIs, and in the process have developed publications, guidance and scientific research (see Baseline section for Component 3). Currently however, this material is dispersed across many online and offline platforms and not readily accessible for national policymakers, intergovernmental organizations, civil society organizations and other prospective users of such information, including users of CoCs, consumers and the interested general public. All stakeholders who produce this material have a common interest in widely disseminating their knowledge, but are constrained by the lack of direct access to the diverse potential communities who need the information; and by a lack of communication expertise in how to target and develop outreach materials to serve the needs of the intended audience. This project proposes SAICM Secretariat facilitate this wide dissemination of the knowledge held by diverse stakeholders, by providing a platform and specialized communication support/expertise for all actors to share this wealth of resources and information.

Root causes and barriers that need to be addressed

SAICM’s overall objective is the achievement of the sound management of chemicals throughout their life cycle so that by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health. The independent evaluation of SAICM notes that much of SAICM’s

²² Wei et al, 2015, Organophosphorus flame retardants and plasticizers: Sources, occurrence, toxicity and human exposure, Environmental Pollution 196

²³ Fantke (2015) From incremental to fundamental substitution in chemical alternatives assessment, Sustainable Chemistry and Pharmacy 1

²⁴ Nurick, R. 2018, Independent Evaluation of the Strategic Approach from 2006 – 2015, <http://www.saicm.org/Beyond2020/IntersessionalProcess/SecondIntersessionalmeeting/tabid/6193/language/en-US/Default.aspx> (accessed 30 March 2018)

implementation “at the national level rests with the national focal points,” expected to facilitate multi-sectoral engagement in SAICM²⁵. However, the evaluation notes that the “SAICM model rests on one government national focal point per country, with at least 80% of them based within the ministries of environment, with few within ministries of health, agriculture and foreign affairs²⁶.” The need for SAICM to be implemented through a multi-stakeholder approach, within this context of limited stakeholder activity and engagement beyond ministries of environment is a key barrier to meeting the overall SAICM objective.

The following paragraphs outline specific root causes and barriers.

a. Specific root causes and barriers to phasing out lead paint: The issue of lead in paint is not new but it qualified as an emerging issue under SAICM as no appropriate global action had been taken to address it. Two main barriers have identified:

- **Lack of regulations** to phase out lead paints: The lack of capacity in developing countries to introduce and then enforce lead limits is both a specific root cause and barrier to phasing out lead paint at the national level. Support is needed to overcome this lack of capacity to ensure effective regulation can be drafted and enacted.
- **Technical barriers** are faced by small and medium sized enterprises (SMEs) wishing to eliminate lead from paint. Even in countries with regulations on lead paint there is evidence that small paint manufacturers struggle to comply as they have limited technical capacity or resources to formulate lead free paint. Studies on this issue by the University of Cincinnati compared Brazil, India, Armenia and Kazakhstan and found that paint manufactures responded quickly to legislation, formulating lead-additive free paint²⁷. In Brazil for example, a 2009 study identified paints with lead concentrations above 36,000 ppm, and in 2014 these paints had lead concentrations <9 ppm. Unfortunately, though this improvement was not observed in paint brands from small paint manufacturers, which continue to produce paint above the legal limits. This mirrors results in India, where major Indian paint manufacturers decreased the lead concentrations in their paints with the help of NGOs. Similarly to Brazil, in India these improvements were almost completely absent from small manufacturers.

Specific root causes and barriers to managing Chemicals in Products: While chemicals are increasingly present in consumer products, action to identify and manage potential negative impacts has not kept pace with this increase. Four main barriers have been identified:

- Lack of **transparency in supply chains** results from limited uptake (particularly in developing and emerging regions) of available tools to monitor and report the presence of hazardous chemicals. The Chemicals in Products Programme has identified many tools and mechanisms to track and report on the presence of hazardous chemicals²⁸, but these are not systematically adopted or closely coordinated by companies within a sector, or enforced by regulators. Even when information is available within a particular value chain it is not widely available outside e.g. to regulators or consumers of products.

²⁵ Ibid

²⁶ Ibid

²⁷ Clark, C. S., Kumar, A., Mohapatra, P., Rajankar, P., Nycz, Z., Hambartsumyan, A., Peng, H. (2014). Examination of lead concentrations in new decorative enamel paints in four countries with different histories of activity in lead paint regulation. *Environmental Research*, 132, 233-243. doi:10.1016/j.envres.2014.03.006

²⁸ CiP webpage <http://drustage.unep.org/chemicalsandwaste/what-we-do/science-and-risk/chemicals-products/cip-information-systems/cip-information-system>

- Lack of **economic and market based incentives** for producers to track and manage hazardous chemicals in their products and supply chains. Overall, public procurement represents up to 30% of the GDP of a developing country²⁹ with electronics and building products both being sectors with heavy public procurement. Sustainable Public Procurement and sustainable finance policies, standards and experiences are being developed in both sectors but focus more on other sustainability aspects (energy, water, resource use) and inadequately cover hazardous chemical considerations and restrictions. In banking, which is generally the dominant sector within the financial systems of developing countries, the engagement with small and medium material manufacturers and suppliers is through vendor finance and credit facilities. Green or non-toxic materials tend to be more niche products and thus lack economies of scale for lenders to treat them differently.
- Lack of **regulatory drivers** for increased transparency: There is a lack of regulations globally requiring disclosure or phase-out of hazardous chemicals in products, apart from a very few chemicals e.g. POPs or heavy metals. Such regulations, where they do exist, are highlighted by companies as being one of the main drivers to increase reporting and tracking of chemicals in supply chains³⁰.
- Lack of **quantitative sustainability assessment** of hazardous chemicals and their alternatives, leading to 'regrettable substitutions'. Despite this, currently quantitative frameworks are not used at all in identifying and evaluating alternatives to hazardous chemicals. A review of different frameworks for assessing impacts concluded that *"Many alternatives assessment practitioners, particularly those in smaller firms, do not have significant technical or financial resources to conduct detailed quantitative assessments (e.g., of exposure or life-cycle impacts). There is a need for approaches that are thoughtful, yet time- and resource-efficient, as well as for technical and research support for those conducting assessments."*³¹

Specific root causes and barriers to stakeholder engagement and knowledge management: The SAICM Secretariat is mandated to provide advice to countries on implementation of the Strategic Approach through an information clearinghouse³². Currently, the SAICM Secretariat facilitates information sharing, through its website, regional meetings and globally during ICCM, Open Ended Working Groups and other inter-sessional events. However a wealth of relevant data and experience remain hidden in workshop reports and are not extracted and compiled in an easy-to-access open data format. A global mechanism is needed to catalogue, store and distribute knowledge and information so providing a comprehensive overview of stakeholders, activities and studies. Currently no global coordinating platform exists to systematically extract and share the outcomes of knowledge exchange, or ensure long-term engagement of the resources and time by stakeholders to regularly generating and disseminating all their existing information in formats that are accessible for policy makers. Three main barriers have been identified:

²⁹ United Nations Environment Programme (2017). *Global Review of Sustainable Public Procurement*. Available at: <http://www.scpclearinghouse.org/resource/2017-global-review-sustainable-public-procurement>

³⁰ The Business Case for Knowing Chemicals in Products and Supply Chains (UNEP 2014) - http://drustage.unep.org/chemicalsandwaste/sites/unep.org.chemicalsandwaste/files/publications/UNEP%20CiP%20Business%20case_En.pdf

³¹ Alternatives assessment frameworks: research needs for the informed substitution of hazardous chemicals, 2016. <https://ehp.niehs.nih.gov/1409581/>

³² Overall Orientation and Guidance, para 65, <http://www.saicm.org/Portals/12/Documents/OOG%20document%20English.pdf>

- Lack of **coordinated and meaningful participation of different stakeholders** in the SAICM and beyond 2020 process. While SAICM is a multi-stakeholder approach, it has had more success in engaging certain stakeholders than others on EPIs, namely environment sector and government representatives. Fewer than 15% of participants in ICCM4 and OEWG2 were from the science and the academic community, compared with 55% coming from government³³.
- Lack of **context-specific data and high-quality information relating chemicals management and EPIs** to different sector agendas, including specific policy and product sectors, to allow stakeholders to make decisions and take appropriate action on chemical hazards, exposure and management.
- Lack of **interactive features on the SAICM platform for sustained, long-term engagement and connectivity of stakeholders** on knowledge related to chemicals management. The current platform provides information but has limited features for stakeholders to share knowledge, experiences, expertise, research and information on specific EPIs. This hampers progress on taking action on EPIs by individual governments, or in concert, as part of larger initiatives.

2) *Baseline scenario*

Lead in paint: In 2009 the Second International Conference on Chemicals Management (ICCM2), through resolution II/4B, endorsed a global partnership to promote the phasing out of lead in paints and invites all stakeholders to become partnership members. The resolution requested the partnership to adopt its terms of reference using the draft terms of reference presented to ICCM2 and to develop a business plan with milestones for progress in relation to: awareness raising on the toxicity of lead and on alternatives, guidance and assistance to identify potential lead exposure, assistance to industry, prevention programmes to reduce exposure and promotion of national regulatory efforts. The ICCM further invited UNEP and WHO, within their respective mandates, to serve as the partnership's Secretariat.

The Global Alliance to Eliminate Lead Paint (the Alliance herein) is a voluntary partnership formed by UN Environment and the World Health Organization to prevent exposure to lead, while promoting the phase-out of paints containing lead. The Lead paint Alliance is guided by an Advisory Council chaired by the US Environmental Protection Agency (US EPA) and consisting of Government representatives from Colombia, Republic of Moldova, Kenya, Thailand, IPEN International POPs Elimination Network (IPEN), Health and Environmental Alliance (HEAL), International Paint and Print Ink Council (IPPIC), AkzoNobel (a paint company), and United Nations Industrial Development Organization (UNIDO).

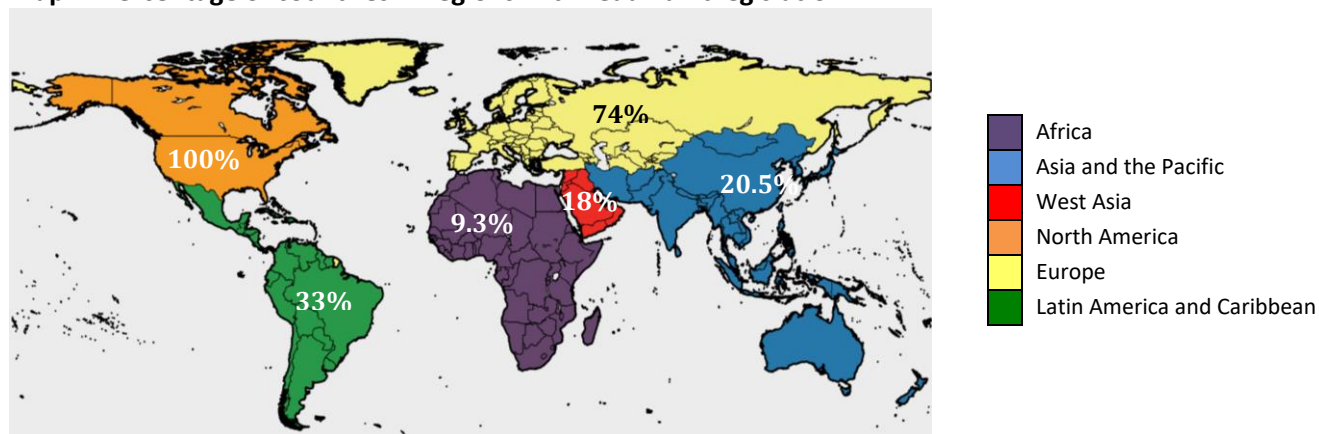
The overall aim of the Alliance is to prevent children's exposure to paint containing lead and to minimize occupational exposure to lead paint. The goal is to phase out the manufacture and sale of lead paint and to eliminate the lead poisoning risks. The Alliance's specific objectives include to: raise the awareness of government authorities and regulators, the private sector, manufacturers, consumers, workers, trade unions and health-care providers about the toxicity of lead paints and the availability of technically superior and safer alternatives; catalyse the design and implementation of appropriate prevention-based programmes to reduce and eliminate risks from the use of lead in paints and products coated with lead paints; help identify paint

³³ Lists of participants from meetings including <http://saicm.org/About/ICCM/ICCM4/tabid/5464/language/en-US/Default.aspx> <http://saicm.org/Portals/12/Documents/meetings/ICCM4/ICCM4%20Side%20Events%20Schedule.pdf> <http://saicm.org/Portals/12/documents/meetings/OEWG1/inf/OEWG1%20INF19%20 LOP.pdf>

manufacturers and formulators that continue to produce and market paints containing lead so as to foster actions to phase out lead from their products; promote the establishment of appropriate national regulatory frameworks to stop the manufacture, import, export, sale and use of lead paints and products coated with lead paints. The Alliance’s aim is that all countries will have legislation to ban lead paint by 2020³⁴.

According to the Alliance **68 countries** have banned lead paint as of September 2017³⁵. However, as many as 100 low and middle-income countries do not yet have legal limits on lead paint, and some countries have limits that are too lax to protect public health, or have gaps in enforcement of lead paint laws. The following map provides a visual representation of lead paint regulations across regions. Progress in developing new lead paint legislation has been slow, with only 14 countries added between 2014-2017.

Map 1: Percentage of countries in regions with Lead Paint legislation



Data Source: World Health Organization: Regulations and controls on lead paint, September 2017, Created 28 September 2017

The 2017-2018 Action Plan sets out activities to assist governments in enacting legal limits on lead in paint, activities to support industry in voluntarily eliminating lead paint and general awareness raising activities on the dangers of lead paint. The Lead Paint Alliance Action Plan for 2017-18 highlights the need for near-term efforts, by national governments around the world, to achieve the phase-out of the manufacture and sale of paints containing lead³⁶. New laws and regulations should establish legal limits on the lead content of these paints, by either banning lead additives or severely limiting the total amount of lead content. In countries where legal limits are not currently in place such actions will help prevent new exposures to lead from paint, especially for children in homes and schools. The Action Plan focuses on encouraging: governments in countries where legal limits are not currently in place to establish and enforce national legal limits on lead in paints to achieve the phase-out of the manufacture and sale of paints containing lead; and industry activities to voluntarily stop the

³⁴ Lead Paint Alliance Business Plan (2012), Accessed, 5 January 2018:

http://www.who.int/ipcs/assessment/public_health/business_plan.pdf

³⁵ UN Environment (2017), Update on the Global Status of Lead in Paint: September 2017, accessed 5 January 2018:

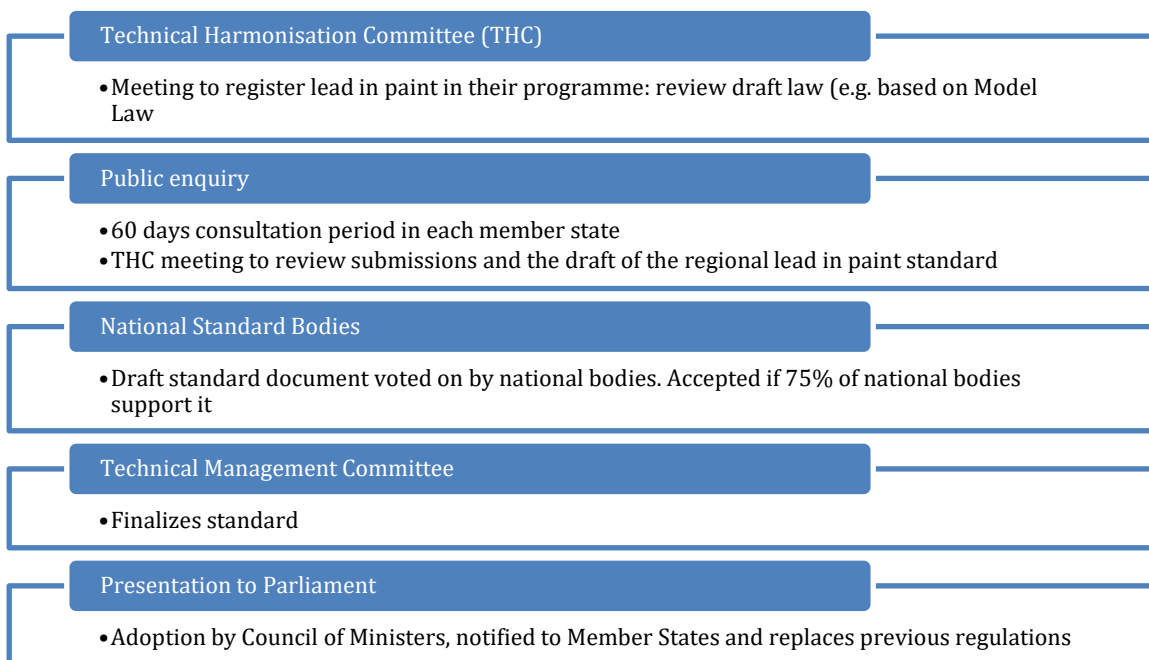
http://wedocs.unep.org/bitstream/handle/20.500.11822/22001/Glbbal%20Update%20Final%20Version%2011_Oct.pdf?sequence=1&isAllowed=y. (Update notes 67, but Cameroon have since regulated, taking the total to 68).

³⁶ Lead Paint Alliance 2017-2019, Action Plan. Accessed, 4 January 2018

https://wedocs.unep.org/bitstream/handle/20.500.11822/20954/Draft_LPA_Action_Plan_2017-18_Final.pdf?sequence=1&isAllowed=y

manufacture and sale of lead paints in countries where legal limits are not currently in place. The Alliance will also work to increase awareness of the health and environmental risks posed by lead paint, to help prompt actions by governments and manufacturers to stop the production and sale of lead paints; and focus on increasing and diversifying the number of Alliance partners, and increase opportunities for partners to engage.

Regional standards are an important pathway for development of national legislation and to control sub-regional trade. The ECOWAS Commission was mandated by its Member States at the 16th African Ministerial Conference on the Environment (AMCEN) meeting held in 2017 to develop such a standard on lead paint. The steps/ activities towards this regional standard are presented in the flowchart below:



As part of efforts to accelerate progress on lead paint phase out, in December 2017, the third session of the **UN Environment Assembly** of the UN Environment Programme adopted a resolution on lead paint and promoting the environmentally sustainable management of lead-acid batteries (UNEP/EA.3/L.24). The resolution commits governments to reducing exposure to lead through eliminating lead paint. Specifically, it encourages governments yet to do so, to develop, adopt and implement legislation on lead paint. It mandates the UN Environment Executive Director to work with WHO to assist countries by providing tools, capacity building, and assistance in developing national legislation.

In May 2017, the Seventieth **World Health Assembly** approved a Chemicals Road Map³⁷ to enhance health sector engagement in SAICM towards the 2020 goal and beyond. The road map outlines four action areas: risk reduction; knowledge and evidence; institutional capacity; and, leadership and coordination. On lead paint, the Road Map commits to finalizing guidelines on the prevention and management of lead poisoning; implementing the guidelines; and phasing out paints containing lead by 2020 as per the objectives of the Global Alliance to

³⁷ WHO (2017), Chemicals Road Map. Accessed: 15 January 2018
http://www.who.int/ipcs/saicm/ChemicalsRoadMapbrochure_en.pdf?ua=1

Eliminate Lead Paint. WHO is currently developing guidelines for managing lead exposure, and guidelines for the prevention of lead exposure. These guidelines are being developed through a rigorous process of systematic evidence review and quality assessment, in accordance with WHO policies. Completion of the prevention guidelines is anticipated towards the end of 2019, following which WHO will undertake implementation activities in countries including training and workshops. The prevention guidelines will recommend a range of interventions including eliminating non-essential uses of lead in consumer products, including paint, through regulations and policies, and have strong links with the work of this project.

The preparatory phase of this project involved extensive baselining activities. Consultations were undertaken directly with countries lacking lead paint legislation, by UN Environment Regional Offices, to ascertain progress on lead paint activities. Alliance partners WHO, IPEN, and US EPA also provided information on countries they have been engaged with. Regional Economic Commissions were also consulted. This desktop review and primary data collection exercise resulted in countries falling into several distinct categories, that serve as a useful framework for analysing the evolution of lead paint regulation. That is, the process of a country moving from a lack of legally protective limits on lead paint, to legally binding regulation, and is outlined in the flowchart below. Countries were categorized according to this framework. This categorization is presented below as Table 2.



Table 2: Framework of evolution of Lead Paint legislation at national level, and classification of target countries

UN E Region	Reg. Collab	Growing national concerns	Initiated work	Law assessment/ first steps	Non-Protective Legislation	LP legislation in process or being drafted.	
Latin America and the Caribbean	CARICOM	Barbados Suriname Bahamas Belize Grenada Haiti Saint Kitts and Nevis Saint Vincent and the Grenadines	Jamaica	Antigua and Barbuda Saint Lucia			
		Andean Region	Bolivia	Peru Ecuador	Brazil	Colombia	
		Honduras	Mexico Guatemala	El Salvador	Panama		
	ASEAN		Vietnam	Malaysia Indonesia		Cambodia Lao People's DR	
Asia-Pacific		Fiji Palau	Mongolia Bangladesh	Pakistan	China		
	ECOWAS	Liberia Burkina Faso Niger Sierra Leone Cabo verde Guinea-Bissau Mali	Gambia Benin Ghana Guinea Nigeria Senegal Togo	Cote d'Ivoire			
		SADC	Madagascar	Mozambique D. Republic of the Congo Zambia			Swaziland Mauritius
		EAC		Burundi Rwanda South Sudan Uganda			
West Asia			Sudan Tunisia	Egypt	Morocco	Ethiopia Gabon	
				Lebanon	Jordan		
Europe	EAEU				Armenia Belarus Kazakhstan Kyrgyzstan		
		Uzbekistan	Azerbaijan Georgia Tajikistan	Israel		Bosnia and Herzegovina Moldova Ukraine	
Total n= 77		20	26	12	9	10	

To provide assistance to countries in enacting regulations on lead paint by 2020, in 2017 the Alliance launched a **Model Law and Guidance for Regulating Lead Paint** (the “Model Law”). This serves as a reference for countries to develop legislation suited to national or regional regulatory structures and legal systems³⁸. It recommends a **concentration limit of 90ppm of total lead** and proposes a delivery approach that will be adapted by project

³⁸ Model Law, accessed 5 January 2018:

<http://wedocs.unep.org/bitstream/handle/20.500.11822/21843/Lead%20Paint%20Model%20Law%20and%20Guidance%20FINAL10.04.17.pdf?sequence=1&isAllowed=y>

partners to assist in building a sustaining momentum among stakeholders; serving as working-level contacts; and coordinating with technical and legal experts. It also outlines the need for legal experts to: evaluate national regulatory structures to identify pathways for mandatory phase out of lead paint; support drafting of proposed lead phase-out legal text or amendments to existing legislation in partnership with local actors (to ensure country ownership); training national officials and stakeholders; and raising awareness.

The Alliance **on-line Toolkit for Establishing Laws to Control the Use of Lead in Paint**³⁹, and **Model Law and Guidance on Regulating Lead Paint**⁴⁰ form the basis of training and outreach to governments and stakeholders to promote lead paint laws.

As part of the project preparation process, UN Environment worked closely with **project partners** (Alliance members) who are already providing support to countries working towards regulating lead paint. UN Environment and consulted extensively with **legal specialists**, specifically the Rule of Law Initiative (ABA-ROLI), of the American Bar Association, an international development program that promotes justice, economic opportunity and human dignity through the rule of law. The initiative has worked in more than 100 countries to strengthen legal institutions, to support legal professionals, to foster respect for human rights and to advance public understanding of the law and of citizen rights. ABA-ROLI's in-country partners include government ministries, judges, lawyers, bar associations, law schools, court administrators, legislatures and civil society organizations.

In terms of **technical barriers**, there are very limited efforts to provide technical guidance for the replacement of lead additives (mainly driers and pigments). In 2015, IPEN commissioned two reports that provide technical guidance to small paint manufacturers that may not have access to technical experts for reformulation⁴¹; while in 2016, UNIDO's Innovative Approaches to the Sound Management of Chemicals and Chemical Waste (IAMC) has produced a technical guidance on paints and varnishes which includes lead⁴². The documents detail potential problems reformulating paint, provide a list of raw material manufacturers and industry feedback on lead pigment replacement. Both documents target SMEs that would otherwise not have access to the technical information required to reformulate their paints. Implementing these technical guidelines will be critical to the effectiveness of regulations limiting lead in paint. Although these documents exist there is no evidence of widespread dissemination or take up by SMEs, and as such they have not yet served to assist small companies in overcoming the technical barriers.

³⁹ UNEP, Toolkit for Establishing Laws to Control the Use of Lead in Paint:

<http://web.unep.org/chemicalsandwaste/noleadpaint/toolkit> (Accessed 23, January 2018)

⁴⁰ UNEP 2017, Model Law and Guidance for Regulating Lead Paint:

https://wedocs.unep.org/bitstream/handle/20.500.11822/22417/Model_Law_Guidance_%20Lead_Paint.pdf?sequence=1&isAllowed=y (accessed 23 January, 2018)

⁴¹ Lead drier replacement in solvent based alkyd decorative paints (pp. 1-24, Tech. No. 1049CIPE002R). (31 July 2015). England: Safinah Ltd. <http://www.safinah.co.uk/wp-content/uploads/2017/02/Lead-drier-replacement-in-solvent-based-alkyd-decorative-paints.pdf>

⁴² UNIDO, 2016, Innovative Approaches to the Sound Management of Chemicals and Chemical Waste (IAMC) – Paints and Varnishes toolkit. Accessed on 6 February 2018:

https://iamc-toolkit.org/sites/default/files/G2_Draft_PaintVarnishes_FINAL%20DRAFT_16_08_2016-MM.pdf

The IAMC technical guidance was developed by UNIDO to provide producers of chemicals, formulators and industrial users of chemical products with approaches and specific technical solutions to chemicals and chemical waste management. The manual was developed after UNIDO completed work in Colombia, Egypt, El Salvador, Morocco and Peru on the identification and implementation of innovative alternatives and solutions in the following subsectors: industries in the paint formulation, paint application, textile finishing and polymers domains. The manual aims to trigger innovative ideas, providing cost-effective innovative solutions for companies in developing countries and subsectors to implement environmentally sound management of chemicals and chemical waste with high impact. The manual includes a section on eliminating lead paint. It recommends strengthening technical assistance for industries to help them to eliminate lead paint step-by-step from their production processes. It also promotes collaboration between industry and governments to come up with guidelines on suitable substitutes for the lead compounds used in paint manufacturing.

Recognizing the need to address both **capacity constraints** and **technical barriers** (outlined in the barriers and root causes above) to removing lead in paint, and the need to help SMEs to ensure efficient reformulation of paint, UN Environment also consulted extensively with National Cleaner Production Centres (NCPCs) and IPEN during the project preparation phase. NCPCs are mandated to raise awareness of the benefits and advantages of Resource Efficient and Cleaner Production (RECP) network; demonstrate the environmental, financial and social benefits of RECP through in-plant assessments and demonstration projects; help obtain financing for RECP; provide policy advice to national and local governments; and disseminate technical information.

IPEN has undertaken significant lead paint reduction activities in Asia and Africa. The NCPC in Serbia was noted to have significant expertise in paint reformulation, and provided technical support and contribution to project development.

The Regional Activity Centre for Sustainable Consumption and Production (www.cprac.org) is the Regional Centre of the Stockholm and Barcelona Convention in Spain. Within the SwitchMed Programme (www.switchmed.eu/en) they produced a publication on how to prevent the use of 20 toxic chemicals in products in the Mediterranean region. Out of these 20 case studies, a small number of pilot projects was selected for countries of the Middle East/North Africa region. Substitution of Lead in Paint in Tunisia was selected as the pilot project, and a similar approach will be adopted to the BAT/BEP demonstration projects planned by the GEF project.

Jordan, Peru, Ecuador, Colombia, China, Indonesia and Nigeria have paint industries still using lead additives and are countries moving to regulate lead paint. A brief overview of the baseline in each of these countries is included in the following paragraphs.

Jordan: Jordan has nonprotective legislation allowing a maximum of 600ppm lead in paint. The government is planning on introducing a more stringent limit. However, significant barriers exist, as paint manufacturers are struggling to overcome technical barriers are concerned about cost increases and losing market share due to cheaper imported paint (which also contains lead) and are in turn lobbying the Government of Jordan. According to baseline information provided by NCPC Jordan there are 86 companies in Jordan manufacturing paint and several of these are microenterprises with less than 10 employees. A baseline project on cleaner production in three industrial sectors included one paint producer (SIPES), and identified the replacement of lead chromate pigments as a priority need. Public awareness is also very low. One barrier is the import of cheap

lead paints from neighbouring countries such as Lebanon and Egypt, which limits the ability of national companies to adopt even slightly increased cost formulation options and alternative raw materials. A 2012 IPEN study collected samples from 16 companies, and found 18% had lead concentrations >90ppm⁴³.

Peru: According to baselining activities by NCPC Peru, there are over 300 companies either producing or importing paint in Peru. Of these, a significant portion are very small manufacturers. In terms of technical barriers, faced by manufacturers, NCPC identified: limited know how of lead free alternatives; limited suppliers; high prices for alternative raw material for industry paint; and low awareness of end-users. A 2009 IPEN study tested 10 solvent-based paints from two paint companies. The results indicated 90% of paints had lead concentrations greater than 90 ppm, and 40% of paints had concentrations greater than 10,000 ppm⁴⁴.

While Peru lacks legislation on lead paint, it does have legislation on lead in toys and furniture, which the NCPC has been closely involved in. Since 2013 to date, over 8450 puzzles, toys and stationeries containing lead have been seized. The Government of Peru has expressed interest in regulating lead paint, and has attended a meeting of the Alliance.

Colombia: NCPC Colombia (CNPMLTA) has extensive experience working on chemicals and specifically paint. It has executed several projects on the innovation and development of new products with Colombian companies, including resins and paints, and the elimination of heavy metals. CNPMLTA has established contact with small and medium enterprises of paint sector including Pinturas Azteca, Tintas y Pinturas Especiales, PINTUCO and CORONA.

According to baselining activities completed by NCPC Colombia, there are 79 large companies producing paint in the country and approximately 80 SMEs. NCPC Colombia also consulted SMEs and several have expressed interest in participating in the project. Although specific information on lead in paints is not available, according to NCPC Colombia's baselining activities over 900 tons of waste contaminated with lead was reported by paint companies in 2010, indicating significant use of lead paint manufacture. In 2016, IPEN analyzed 39 solvent-based paints from 11 brands. The analysis found that 64% of paints samples had lead concentrations greater than 600 ppm, with 59% of paints with lead concentrations greater than 10,000 ppm⁴⁵. While Colombia lacks legislation regulating lead in paint, it has regulated lead content in toys. The Government of Colombia has expressed interest in receiving technical support through the project to regulate lead paint.

China: NCPC China (CNCPC) was established in 1994, and focuses on policy advice to national and local governments, developing innovative cleaner production techniques, and producing sector-based cleaner production guidelines. According to national baselining completed by NCPC China⁴⁶, there more than 2,100 paint companies producing paint in China. Key paint production hot spots were identified as Guangdong, Shanghai, Jiangsu, Hunan and Shandong provinces. At present, lead-based paint is widely used in furniture, toys and

⁴³ IPEN 2017, Global Lead Paint Elimination Report. Accessed 9 February 2018.

http://ipen.org/sites/default/files/documents/ipen-global-lead-report-2017-v1_2-en.pdf

⁴⁴ Ibid

⁴⁵ Ibid

⁴⁶ Market Analysis Report of Promoting Elimination of the Use of Lead Paints in China, Solid Waste and Chemicals Management Centre, Ministry of Environmental Protection of China (2017)

school supplies in China. According to an IPEN study which analysed 141 paints, 34% of paints contained lead concentrations above 10,000 ppm⁴⁷. The Government of China has enacted regulation addressing soluble lead content in paint for various uses, as opposed to total lead. The **soluble** lead content in all paints is limited to between 90mg/kg (90 ppm) and 1000mg/kg (1000 ppm), depending on the use of the paint. This is considered to be unprotective, and in need of revision.

Ecuador: Ecuador is a producer and exporter of paint. The country produces over 58,000 tons per year, with four companies holding 95% of the market share. These companies have been consulted on the project, and have confirmed their participation in the project through submission of co-finance letters. While no protective regulation exists for lead paint, lead content in toys is regulated by the technical standard NTE INEN-ISO 8124-3, Safety of Toys. A paint study completed by IPEN in 2009 found 70% of paints samples had lead concentrations greater than 90 ppm⁴⁸.

Indonesia: In 2013 and 2015, IPEN completed paint analysis as part of the IPEN Asia Lead Paint Elimination Project⁴⁹. According to the report, in 2012 Indonesia's paint market equated to US\$ 962 million), a 10% increase on the previous year. Two paint companies, PT. Nipsea Paint and Chemicals and ICI Paints Indonesia, Nippon, and Avian have over 62% of the market share. The remainder of the paint market is held by eight smaller manufacturers, and 10% of the market is held by small firms. The IPEN project analysed paint from 52 manufacturers. A total of 83% had lead concentrations greater than 90ppm, with 78% having concentrations greater than 600 ppm. Most concerningly, 41% of paints had a lead concentration greater than 10,000ppm. All paints from market leaders Avian, Nippon, Danapaint, Kansai, RJ London's paints had lead concentrations between 600ppm and 10,000ppm⁵⁰. According to the report, alternatives supplier Clariant is active and expanding in Indonesia, meaning lead free pigments are available.

Nigeria: In 2016 IPEN's Global Lead Elimination Campaign, funded by the Swedish Government, investigated lead content in decorative paints in Nigeria. The local partner SRADev Nigeria purchased 54 cans of solvent-based paint intended for home use from stores in Lagos, Nigeria, sampling 18 different brands produced by 16 manufacturers⁵¹. The study found that 74% of paints sampled to have lead concentrations greater than 90 ppm. In 54% lead concentrations were greater than 10,000 ppm⁵². The highest lead concentration detected was 160,000 ppm in a yellow Finecoat Paint sold for home use⁵³. Nigeria currently has no regulation in place limiting the amount of lead in paint for household and decorative use.

⁴⁷ IPEN 2017, Soluble and Total Lead Content of Solvent Based Paint for Home Use in China. Accessed 6 February 2018.
http://ipen.org/sites/default/files/documents/ipen-china-lead-report-v1_3-en.pdf

⁴⁸ IPEN 2017, Global Lead Paint Elimination Report. Accessed 9 February 2018.

http://ipen.org/sites/default/files/documents/ipen-global-lead-report-2017-v1_2-en.pdf

⁴⁹ IPEN 2016, Lead in Indonesia's New Enamel Household Paints. Accessed 9 February 2018

<http://ipen.org/sites/default/files/documents/National%20Report%20Lead%20in%20Indonesia%27s%20New%20Enamel%20Household%20Paints.pdf>

⁵⁰ Ibid

⁵¹ IPEN 2017, Lead in Solvent Based Paints for Home Use in Nigeria. Accessed 22 February 2018.
http://ipen.org/sites/default/files/documents/ipen-nigeria-lead-report-v1_1-en.pdf

⁵² Ibid

⁵³ Ibid

Chemicals in Products: Baseline initiatives cover all three of the main barriers to managing the risks of chemicals in products, namely promoting transparency in supply chains; promoting wider adoption of these and chemical management / risk reduction decisions, including substitution based on scientific assessment. Sector-specific baseline information is given in the following section.

Life cycle assessment (LCA) is a standardized methodology to assess the environmental impacts connected with the lifecycle of products, processes and activities. One widely used model to assess toxicity of chemicals within LCA is USEtox, the UNEP/Society of Environmental Toxicology and Chemistry (SETAC) scientific consensus model for characterising human and ecotoxicological impacts of chemical emissions in life cycle assessment⁵⁴. This model is the result of a multi-year consensus building process to provide a science-based method and global guidance for assessing fate, exposure and effects of chemical emissions, which is now formally endorsed by the Life Cycle Initiative⁵⁵ and widely accepted and used as the default tool for toxicity/ecotoxicity in a number of LCA impact methods (including the European Commission's International Reference Life Cycle Data System⁵⁶, the US EPA Tool for Reduction and Assessment of Chemicals and Other Environmental Impacts⁵⁷, and the Life-cycle Impact Assessment (LCIA) Method based on Endpoint modelling (LIME) from the National Institute of Advanced Industrial Science and Technology⁵⁸). The model proposes characterization factors for human toxicity and freshwater ecotoxicity, which allow users to quantitatively calculate and compare the potential impacts associated with exposure to chemicals of concern. While the model has achieved a broad consensus on the characterization factors it includes, these focus on 'far-field' exposure routes (e.g. indirect exposure pathways such as via consumption of food with residues) and do not adequately represent "near-field" or direct exposure routes such as occupational exposure or by consumers or hand-mouth behaviour by children in respect of toys.

Under the Life Cycle Initiative project on Global Guidance on Life Cycle Impact Assessment Indicators and Methods, a prototype has been developed for four sectors (buildings, food contact packaging, personal care products and detergents) which includes parameters for calculating near-field exposures and pathways, notably indoor air quality, volatilization and dermal exposure. These prototypes are still in development phase, and while the parameters and some data sources and values have been added, these require validation by manufacturers and governments. While most priority CoC are already included in the model (with emission/ exposure / impact factors from scientific literature available for quantitative calculations), there is still considerable scope for producers of alternative materials to provide equivalent data on alternatives to allow comparative calculation of potential impact. The consensus approach of USEtox would also require thorough peer review and validation for these prototype extensions to be fully incorporated into the model.

⁵⁴ UNEP/SETAC scientific consensus model for characterizing human toxicological and ecotoxicological impacts of chemical emissions in life cycle assessment (2017) <http://doi.org/10.11581/DTU:00000011>

⁵⁵ The Life Cycle Initiative (www.lifecycleinitiative.org) is a public-private, multi-stakeholder partnership hosted by UN Environment since 2002, with the mission to bringing Life Cycle Thinking to the mind-sets of decision makers with the practical knowledge and tools to enhance the sustainability of their decisions.

⁵⁶ <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/international-reference-life-cycle-data-system-ilcd-handbook-general-guide-life-cycle>

⁵⁷ <https://www.epa.gov/chemical-research/tool-reduction-and-assessment-chemicals-and-other-environmental-impacts-traci>

⁵⁸ <https://www.aist-riss.jp/old/lca/cie/activity/project/lime/index.html>

UN Environment’s **Finance Initiative** works with investment and financiers to promote sustainable development. The Environmental and Social Risk Analysis Training Programme seeks to support banks in establishing and implementing effective environmental and social risk management systems, for example based on ecolabels such as the energy*. Some specific instruments relevant to pollution prevention include voluntary and mandatory pollution liability insurance, or the innovative “green supply chain finance⁵⁹” which allows buyers and suppliers in supply chains to improve their working capital by allowing a supplier to sell its invoices to a bank at a discount as soon as they are approved by the buyer. That allows the buyer to pay later and the supplier to secure its money earlier.

Retailer and foreign trade initiatives, largely in developing countries, use consumer power to leverage safer chemicals policies in supply chains. In the US, the 2017 “*Who’s Minding the Store? — A Report Card on Retailer Actions to Eliminate Toxic Chemicals*” is the second annual evaluation of the safer chemicals programs of thirty of the largest retailers in the United States⁶⁰. The Mind the Store campaign of Safer Chemicals, Healthy Families has developed a comprehensive check list of retailers across different product sectors. Factories in the toy sector are mainly in China, while textiles in India and Bangladesh.

During the PPG phase, value chain actors in the three sectors were consulted to produce a screening of **supply chain transparency and risk reduction tools and initiatives** that already exist and could be effectively adapted and/or scaled up to deliver risk reduction from chemicals in products⁶¹. The priority tools as presented in Table 3 are described in the consultant report (Isspro 2017, refer to footnote 62), and were discussed at a stakeholder consultation meeting held during the PPG. The final project design reflects the prioritized approaches that were agreed by the participants at that workshop.

Table 3: Prioritization of tools and initiatives that address, or have a high potential to address, CiP

Tools and initiatives	Relevance to address key intervention points	Creation of an enabling environment/ Potential for knock-on effects	Potential for use in LMIC	Life-cycle perspective	Building on established tools and success stories
Sustainable Public procurement	Yellow	Green	Green	Yellow	Green
Eco-innovation	Yellow	Green	Green	Green	Yellow
Chemical Leasing	Yellow	Yellow	Green	Yellow	Yellow
Building certificates	Yellow	Green	Green	Green	Green
Cleaner Production	Yellow	Green	Green	Green	Green
Usetox	Green	Red	Yellow	Green	Green
Ecolabels	Green	Yellow	Green	Yellow	Yellow
National Multi-Stakeholder Platform on Voluntary Sustainability Standards	Yellow	Green	Green	Yellow	Yellow
Draft Guidelines for Providing Product Sustainability Information	Yellow	Green	Green	Yellow	Green
Chemical Footprint Project Assessment Tool	Green	Yellow	Yellow	Yellow	Green
Cradle to Cradle Certified Product Standard	Green	Yellow	Red	Green	Green
BizNGO Guide to Safer Chemicals	Green	Yellow	Red	Yellow	Green
The SIN (Substitute it Now!) List	Green	Red	Green	Yellow	Green
BOMCheck (refer to footnote 62 for more details)	Green	Red	Green	Yellow	Green
chemSHERPA (refer to footnote 62 for more details)	Green	Red	Yellow	Yellow	Green

⁵⁹ <http://lexicon.ft.com/Term?term=supply-chain-finance>

⁶⁰ Safer Chemicals, Healthy Families (2017) http://retailerreportcard.com/wp-content/uploads/2017/11/retailerreportcard.com_2017_factsheet.pdf

⁶¹ Isspro (2017) Chemicals in Products: Strengthening Action Workshop – Final Report

Tools and initiatives	Relevance to address key intervention points	Creation of an enabling environment/ Potential for knock-on effects	Potential for use in LMIC	Life-cycle perspective	Building on established tools and success stories
Electronic Product Environmental Assessment Tool (EPEAT®)	Green	Red	Yellow	Green	Green
Restriction lists	Green	Yellow	Green	Red	Green
GreenScreen List Translator	Green	Yellow	Green	Red	Green
IMDS (refer to footnote 62 for more details)	Green	Red	Yellow	Yellow	Green
Pharos (refer to footnote 62 for more details)	Green	Yellow	Yellow	Yellow	Yellow
Chemical Management Database	Green	Yellow	Green	Red	Yellow

Colour coding (green = very suitable, orange = suitable, red = not particularly suitable).

Building products: UN Environment’s Chemicals and Health Branch (CHB) Programme of Work includes a recently approved project on ‘Advancing Sustainable Chemistry in Production, Products and Value Chains’, piloting work in the building sector, with baseline studies to identify and assess chemicals of concern and potential safe alternatives, regulatory frameworks, existing guidance and initiatives, and intervention opportunities. It also aims to identify and establish partnerships in the sector, including with sustainable chemistry front-runner companies.

The World Green Building Council and its 73 national member councils advocate for green buildings, covering all impacts from climate, waste, energy, and including a focus on Indoor Air Quality and use of non-toxic materials⁶². In practice, most of the green building tools, such as rating systems, focus heavily on energy/climate and waste issues, for example the Green Star ecolabel. Emphasis on hazardous substances is often limited to volatile organic compounds (VOCs) and insufficient consideration of wider hazardous chemicals, taking into account the building construction phase, use phase, and demolition phase.

The Global Alliance for Buildings and Construction (GABC) is an initiative launched at the UN Framework on Climate Change (UNFCCC) COP21, as part of the Lima Paris Action Agenda. It aims to mobilise all stakeholders, including member states and non-state actors from the Buildings and Construction sector to scale up climate actions in the sector. The GABC focuses on the achievement of the low-carbon and energy transition through fostering the development of appropriate policies for sustainable, energy efficient buildings, which allows a concrete value-chain transformation of the sector. There is a focus on indoor air pollution, to which the chemicals are highly relevant, but to date there has been limited action on this part of the initiative.

The 10YFP Programme on Sustainable Buildings and Construction is a multi-stakeholder programme, led by Finnish ministry of Environment, and co-lead by RMIT university and UN Environment⁶³. It has the following four priorities: enabling framework, sustainable housing, sustainability in the supply chain, and reducing climate impacts. The programme is implementation focused, on resource efficiency and circular economy. It would be useful to mainstream findings on chemicals of concern of the project into the Programme, and reach to its over 45 members. A working group co-led by Action Sustainability and the IISD will collect experiences and information on the topic of enhanced sustainability in infrastructures and construction through procurement.

⁶² <http://www.worldgbc.org/sites/default/files/Better%20Places%20for%20People%20-%20Schools%20Briefing%20Notes%20-IAQ.pdf>

⁶³ <http://www.spcclearinghouse.org/sustainable-buildings-and-construction/actors>

During the PPG, a survey of the Resource Efficient and Cleaner Production Network (RECPnet) members from several countries mentioned that buildings and construction is important to the policies of their countries. However, only Colombia, Brazil, and a partner in Finland specifically referred to setting building and constructions standards related to chemicals. Overall, the policies and sustainable procurement policy are oriented towards environmental performance, energy efficiency, and sometimes referring to health. Examples of such national buildings standards include:

- Brazil has a voluntary certification (PBQP-H⁶⁴) for building products which includes some requirements on chemical safety (lead free paint; lead and cadmium-free ceramic coatings and porcelain; ban of asbestos in walls and roofs; avoiding or at minimum labelling flame retardants). Public housing programmes are required to use this standard, which has created demand for these basic chemical safety features.
- Colombia has developed sustainability criteria for the construction sector, such as lead-free paints, mercury-free luminaires, mercury-free batteries etc, based on four technical sheets developed in 2012 for bricks, cement, ceramic tiles, and paints. In the framework of the EC-funded project SPPEL led by UN Environment, Sustainable Public Procurement (SPP) guidelines inclusive of product sheets with sustainability criteria for goods and services have been developed (in Spanish).
- Green Building Council Sri Lanka (GBCSL) received membership from the World Green Building Council in 2010 two years ago, and is applying the existing national Green Building Code, GREENSL[®] Rating System for Built Environment⁶⁵. This code includes criteria for Materials and Resources and Indoor Environmental Quality which are relevant for CoC, including VOC levels for air quality, and additional points available if green labelled building materials are used for the building. The GBCSL has such a labelling system, GREENSL Product Labelling System⁶⁶, which covers 13 product categories and requires testing of some chemicals, e.g. Chromium 6, VOC and lead for paints. However, this labelling system does not cover all relevant building products, such as electronic equipment for buildings. The GBCSL has expressed interest in establishing local criteria that include more comprehensive chemicals considerations.
- The National Cleaner Production Centre in Sri Lanka (NCPCSL), is well integrated with companies in the building sector, including the national paint manufacturing association; hotels and construction contractors. It has an active SWITCH Asia project with the Ministry of Environment to develop a Sustainable Public Procurement policy, including preparing documents for 5 groups of products, including paint and light bulbs in the buildings supply chain. Two workshops to educate policy makers and procurement people are planned to take place in the coming months. The NCPCSL is also currently implementing a SWITCH-Asia funded project on improving Resource Efficiency in SMEs of the metal sector supplying to the construction sector covering 80 SMEs in the sector.

The Global Environmental, Social and Governance Benchmark for Real Assets (GRESB) is the dominant tool used by leading institutional investors as the global benchmark for real estate investments on environmental, social and governance (ESG) performance, primarily used for investments in developed economies. A 2016 Health and

⁶⁴ http://www.inmetro.gov.br/qualidade/produtosVoluntarios/mat_construcao_civil.asp

and <http://www.inmetro.gov.br/qualidade/rtepac/voluntarios.asp>

⁶⁵ <http://srilankagbc.org/Rating%20System%20for%20Built%20Environment.html>

⁶⁶ <http://srilankagbc.org/GREEN%20Labeling%20System.html>

Well-being includes indicators for design & operation strategies for indoor and outdoor air quality and toxic exposures, measured for new construction, refurbishment and operation phases⁶⁷.

In Sri Lanka, as in many developing economies, the banking sector dominates the financial system, accounting to nearly 60% of the total assets of the financial system in 2014⁶⁸. With regards to housing finance, the finance comes from both public and private banks. Sri Lanka has some existing capacities on sustainable finance. The Central Bank of Sri Lanka (CBSL) joined the IFC's Sustainable Banking Network in Nov 2016⁶⁹ and the largest private bank, Commercial Bank of Ceylon (CBC) is receiving up to \$100m loan from IFC to improve access to Green Financing in Sri Lanka⁷⁰. DFCC Bank (Development Finance Corporation of Ceylon), a commercial development bank also has experience in green finance and has received the Karlsruhe Sustainable Finance Awards organised by the Global Sustainable Finance Network in 2017.⁷¹ Finally, the Colombo Stock Exchange is a UN Sustainable Stock Exchanges Initiative member.⁷²

Electronics: Regulatory drivers for reporting of chemicals in electronics is globally led by the EU RoHS 2 Directive, which restricts the use of 10 hazardous substances in electrical and electronic equipment, for example, lead and cadmium⁷³. This piece of legislation as well as its process for determining new restrictions including and the need for exemptions thereof has set a global standard and is the strictest of its kind. Since RoHS emerged some 33+ jurisdictions outside the European Economic Area have either introduced similar or different laws (e.g. China, India and the Eurasian Economic Community). For the most part countries attempt to copy EU RoHS but sometimes, intentionally or not, different rules are introduced, for example in the treatment of exemptions, deadlines, assessment requirements, or dealing with updates to the original RoHS legislation by the EU. This proliferation of RoHS laws across the world is an enormous challenge for the tech sector with its highly complex global supply chain. Companies with a global footprint tend to design products to comply with this highest standard, hoping to be able to sell them globally. Since the EU does not have the mandate to coordinate with other countries that may adopt its regulation, individual companies must work on a bilateral basis with such governments, at the same time working processes such as WTO Technical Barriers to Trade.

Most major electronics manufacturers have developed their own restricted or reportable substances lists, with many hazardous substances included and either already phased out or in the process. Many of these global companies explicitly design their chemical transparency initiatives to facilitate reporting under the EU RoHS and other national and regional regulations, but there is currently no industry-wide common standard for environmental performance or chemical safety.

EPEAT is one of the most widely adopted voluntary ecolabel in the IT sector, and EPEAT-registered products meet strict environmental criteria that address the full product lifecycle, from energy conservation to product

⁶⁷ <https://gresb.com/wp-content/uploads/2017/07/2017-GRESB-RE-Health-and-Well-being.pdf>.

⁶⁸ http://www.cbsl.gov.lk/htm/english/05_fss/f_1.html

⁶⁹ http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/company-resources/sustainable-finance/sbn_whatsnew

⁷⁰ <https://ifcextapps.ifc.org/ifcext/pressroom/ifcpressroom.nsf/0/07E98F6CB5533E4D85258168002D8B19>

⁷¹ <http://dailynews.lk/2017/08/03/business/124054/dfcc-bank-recognised-germany%E2%80%99s-karlsruhe-sustainable-finance-awards>

⁷² <http://www.sseinitiative.org/fact-sheet/colombo-stock-exchange/>

⁷³ http://ec.europa.eu/environment/waste/rohs_eee/index_en.htm

longevity and end-of-life management and toxic materials including lead, mercury, cadmium, hexavalent chromium, bromine and chlorine. It is a resource for purchasers, manufacturers, resellers and others to identify environmentally preferable electronic devices. EPEAT is provided by the Green Electronics Council (GEC), Member of the Multi-Stakeholder Advisory Committee of the 10YFP Sustainable Public Procurement Programme led by UN Environment. In 2017, GEC commissioned a review of (mainly US-based) voluntary standards to identify common criteria around corporate governance and corporate social responsibility, including in the area of sound management of chemicals in products. The output of this review is intended to support the launch of a voluntary consensus standard based on common criteria to facilitate the recognition of products for example in SPP processes, and to link chemicals management with corporate social responsibility practices.

Office IT equipment is a major spend for public authorities, and is ranked as the first priority category of all product sectors in sustainable public procurement plans⁷⁴. UN Environment is assisting 16 governments throughout the world on designing and implementing SPP policies. A number of these governments (Vietnam, Colombia, Ecuador, Morocco, etc.) have chosen IT equipment as an initial priority category for their SPP plan.

In the PPG survey of RECPNet conducted in October 2017, Peru reported that electronic devices are covered by the National Plan of Sustainable Public Procurement and its technical regulations. A Supreme Decree N ° 001-2012-MINAM establishes a set of rights and obligations for the management of Waste Electrical and Electronic Equipment (WEEE), through the stages of solid waste management. Additionally, it establishes the implementation of the responsibilities of the actors involved in the management of WEEE and manufacturers of electrical and electronic equipment (EEE), to work together with municipalities and include extended producer responsibility (EPR).

In 2015/16, Brazil developed requirements for public procurement for electronics, based on either EU RoHS, EPEAT certificate or a voluntary ecological label given by the Brazilian Association of Technical Standards which is a “mix” of the Eu RoHS and EPEAT. Following this experience, Brazil decided to develop a mandatory ‘Brazilian RoHS Directive’, and has started an EC-funded project to do this, including research on legislations related to RoHS around the world, verification of the Brazilian standards on electronics and stakeholder engagement to propose different scenario options, and missions and a seminar with the EU to discuss the implementation and verification on compliance with EU RoHS.

In Colombia, the Ministry of Environment already issued a National Policy, Laws, and decrees related to electronics, which are in the implementation and continuous revision phases. The National Policy for the management of WEEE considers elements of sustainable consumption and production, including strategies such as Ecodesign, Sustainable Public Procurement and the promotion of business competitiveness. This policy commits the government to develop environmental criteria for purchase of electronics (objective 1.5.1). Technical sheets prepared in 2012 (in Spanish) for desktop computers, B & W printers, luminaries and mouse highlighted cadmium, chrome, lead and mercury, as well as plastics with flame retardant (polybrominated), and CFCs, PCBs, ODSs, as the chemicals of priority concern. In the framework of the EC-funded SPPEL project run by

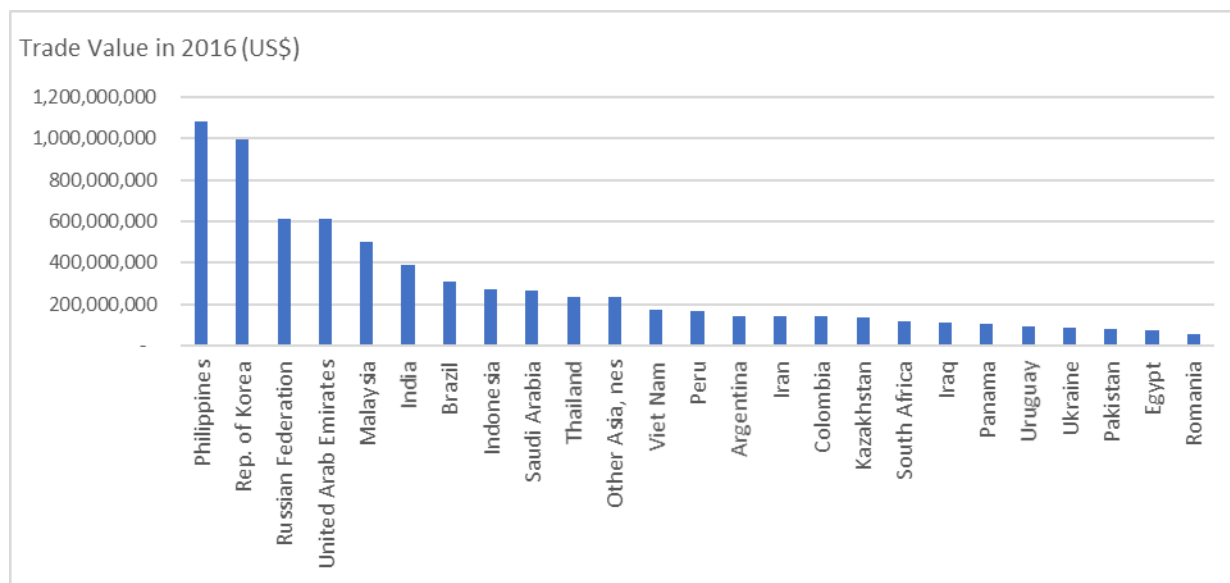
⁷⁴ Global SPP review, UN Environment, May 2017. Figure 24: Priority product and service categories in which to apply SP practices according to survey respondents

UN Environment between 2013 and 2017, an SPP National Action Plan⁷⁵ as well as training and communication material on SPP have been developed. However, the government has not yet implemented these criteria and action plan and needs to roll out some pilot tenders to test the feasibility in the Colombian market.

Over the past two decades, policymakers, producers and recyclers in various countries have created specialised “take-back and treatment systems” to collect e-waste from final owners and process it in professional treatment facilities. Unfortunately, despite these efforts, the collection and state-of-the-art treatment of e-waste is limited, and most nations are still without such e-waste management systems. A baseline study initiated during the PPG phase for Africa seeks to set out the environmental issues associated with the electronic sector, identifying environmental and socio-economic hotspots to guide the identification of corresponding solutions from a systemic perspective, to reduce the impacts from hazardous materials and improve the circularity of the whole sector.

Toys: Toys are a relatively highly regulated product, with several voluntary standards applied and many countries around the world with some form of toy safety regulation, including among others, Argentina, Brazil, China, Arab states, India, Indonesia, Jamaica, Malaysia, Mexico, Saudi Arabia, South Africa and Thailand⁷⁶. Around 80% of the world’s toys are made in China, with \$44 bn exported to the world in 2016. The top non-OECD importing countries are indicated in Figure 1⁷⁷.

Figure 1: List of the top importing countries of toys from China in 2016



In 2016, an independent review identified 702 children’s product recalls reported from every country that publishes consumer product recall information online, including the U.S., EU member states, China, Japan, Canada, Mexico, Australia and most other major industrialized nations. Detachment of parts, and chemical

⁷⁵ Available at <http://www.spcclearinghouse.org/sites/default/files/spp - national spp action plan - final.pdf>

⁷⁶ International Council of Toy Industries, as of Dec 2017: <http://www.toy-icti.org/info/toysafetystandards.html>

⁷⁷ Table based on data from ComTrade: <https://comtrade.un.org/labs/dit-trade-vis/?reporter=156&partner=0&type=C&commodity=95&year=2016&flow=2>

content were identified as the specific product safety concern in nearly 64 percent of the toy recalls⁷⁸. Chemical content (most often phthalates) was the dominant product safety issue associated with the most-recalled toy category (action figures and dolls) and was identified in 112 recalls. For the EU 'Rapid Alert System for Dangerous Products' (RAPEX), toys were the most frequently notified product category in 2016, accounting for 26% of all notifications by member states, and of these notifications, 33% were related to chemical risks⁷⁹. The EU system has a follow up mechanism whereby European authorities follow up with the country of origin of dangerous products, including the RAPEX-China initiative. Toys are by far the most frequently affected products, with over 200 toy-specific follow-up measures reported.

China is the largest toy manufacturing and exporting country and more than 70% of toys in the world, many of which are plastic, are made in China. Although some regulations and supervision on chemicals used in plastic toys, such as "Safety of Toy GB 6675-2014 " "Compulsory Standards of Paint for Toys GB24613-2009" "Inspection and Supervision Measures on Toy Import and Export" "Testing Standard on Toy GB6675" , etc. are strict in China, it appears that the occurrence of some hazardous chemicals in plastic toys may be unintentional and likely due to the use of contaminated recycled plastics as raw material in the toy production. To date, it is still not entirely clear how and to what extent contaminated recycled plastics may enter the supply chain of plastic toys and how this overlooked exposure pathway may contribute to childhood exposure to hazardous chemicals in China.

Knowledge Management and stakeholder engagement:

The SAICM Secretariat tracks progress on SAICM based on 20 SAICM progress indicators⁸⁰. These indicators do not explicitly address EPIs, and despite the strong links between EPIs and the targets included in the 2030 Agenda for Sustainable Development, there is no coordination between these two areas of work. Through resolution IV/4, SAICM stakeholders indicated that the SAICM Beyond 2020 process should be linked to the 2030 Agenda. ICCM 4 Resolution IV/1 para 18 calls for an analysis of their continued use, which is being done in the framework of the Beyond 2020 Intersessional Process. The approach aims to provide a more results-focused set of indicators that are relevant and align diverse stakeholders and sector agendas, as current work on EPIs is driven by the proponents of the EPIs within the SAICM process (1-5 countries in most cases) and the IOMC agencies who lead the issues. The project will therefore design the communication platform for SAICM to mirror the likely structure of the revised progress monitoring system, based on the 2030 Agenda and the SDG goals.

SAICM stakeholders have produced a significant number of knowledge products on the EPIs, as described in the above baseline sections for lead paint and chemicals in products. A similarly rich baseline of knowledge exists for other EPIs including publication of results from FAO projects on regulating HHPs; a UN Environment and WHO publication on the State of the Science of Endocrine Disrupting Chemicals; a global map of monitoring data

⁷⁸ UL Analyzing safety recalls of children's products (2017) https://www.ul.com/consumer-retail-services/wp-content/uploads/2017/08/CS10526_Recalls-WP-Web_05.pdf

⁷⁹ European Union (2017), Rapid Alert System for Dangerous Products, https://ec.europa.eu/consumers/consumers_safety/safety_products/rapex/alerts/repository/content/pages/rapex/reports/docs/rapex_annual_report_2016_en.pdf

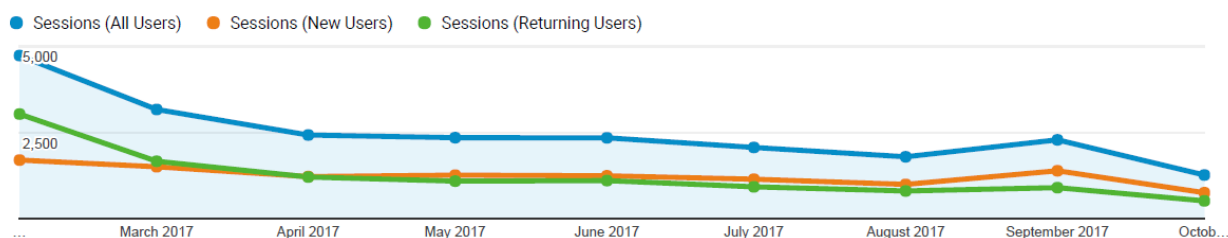
⁸⁰ <http://www.saicm.org/Portals/12/Documents/SAICM-List%20of%20indicators%20for%20reporting%20progress.pdf>

on Environmentally Persistent Pharmaceuticals; UNITAR regional workshop reports on nanotechnology (to name a few). In addition many stakeholders have active chemicals-environment-pollution public awareness raising campaigns and materials, such as UN Environment’s social media campaign ‘Beat Pollution’. These any many other resources are typically available from individual agency or organization websites, and are not readily accessible from a single point of reference, despite being potentially useful for policy makers, communities and consumers, and industrial users of these problematic chemicals. As well as chemical-specific knowledge products, cross cutting issues have also been addressed by SAICM stakeholders, including on the issue of gender and chemicals. A gender review of chemicals issues was completed by the SAICM Secretariat in 2017⁸¹ as part of the Beyond 2020 process, and the results of this review have guided development of the gender activities of this project.

The SAICM website⁸² is hosted by the BRS Secretariat and managed by the SAICM Secretariat. It contains comprehensive information on all the activities that are directly managed by the SAICM Secretariat, including implementation programmes (an up to date database of Quick Start projects and deliverables), meeting documents (ICCM, OEWG and all Beyond 2020 process meetings), an updated database of SAICM national and regional focal points, and media resources (i.e. videos, publications, stories). Recently a section for EPIs was added allowing easier navigation to relevant content; and a new section is under development on the SDGs. The most important source of information and knowledge on the site is via meeting documents, which are submitted by all stakeholders and are extremely comprehensive on a very wide range of EPI topics. However these are uploaded as PDFs or Word documents, with non-descriptive file names and not searchable, and thus the knowledge contained in them is not readily available to visitors as dynamic and accessible site content.

However, the current SAICM website pages are static and entirely maintained by the Secretariat, meaning that other stakeholders are only able to contribute material via the Secretariat staff. Capacity limitations at the Secretariat and lack of clear procedures on what type of information and how to submit mean that current content and information updates are far from reflecting the combined knowledge of all stakeholders. As a result, monthly website visitors oscillate around 1.500 visitors per month, evenly split between new users and returning visitors. User numbers appear to be decreasing marginally over time, refer to Figure 2, below.

Figure 2: SAICM website visitors in 2017



During project preparation, SAICM stakeholders were surveyed through an online survey (11 October – 12 November 2017). Respondents were asked to provide information on their professional affiliations, information

⁸¹ MSP Institute (2017): Gender and chemicals – Questions, issues and possible entry points

⁸² <http://saicm.org/About/SAICMOverview/tabid/5522/language/en-US/Default.aspx>

needs, computer use, and online database searching preference. A total of 77 responses were received, and formed the basis of a SAICM needs assessment. The key findings of the needs assessment included:

- The SAICM website shows restricted availability of information provided to stakeholders and website users. Additionally, there are very limited resources explicitly dedicated to knowledge management.
- The opportunities identified for the development of SAICM's knowledge management strategy suggest the need for a systemized knowledge platform and new mechanisms to communicate science and best practices in policy development, chemicals management and strategic knowledge for Emerging Policy Issues and other issues of concern. Additionally, there is an opportunity to explore and adopt the use of innovative tools and means of communication to reach out to a broader audience (i.e. social media, online collaborative tools).
- In terms of information use, the assessment found that the most significant and consistent usage of information available on chemicals management is used as a reference for guide to develop documents. Information is also used to assess the danger of chemicals, guidance for policy implementation, training purposes and develop ideas for projects.
- SAICM should focus its knowledge work and product sharing into related ongoing scientific research, tracking regulatory status on chemicals and SAICM country implementation as well as SAICM project implementation, results best practices and lessons learned.

The project preparation phase also reviewed existing knowledge management platforms. These, and their relationships to SAICM, are discussed in the following paragraphs.

Global Sustainable Consumption and Production (SCP) Clearinghouse Platform⁸³: A one-stop hub aiming to bring together individuals who are working in SCP, and functions as the knowledge management platform for the 10YFP on SCP. The platform has over 3000 participating members, with an even split between government, civil society, and academic participants. Participants involved in chemicals management such as governments, ministries, science experts, civil society, IGOs, as well as activities from the agriculture, waste, industry, building and construction sectors overlap with SAICM's multi-stakeholder, multi-sectoral approach. A small proportion of SCP members are from the private sector. The clearinghouse is set up as a membership based platform that allows all stakeholders to submit documents and content. Over the year from June 2016- June 2017, the site had close to 20,000 visitors, 95% of whom were new, and 132,000-page views.

Green Growth Knowledge Platform (GGKP)⁸⁴: The GGKP is a global network of international organizations and experts that identifies and addresses major knowledge gaps in green growth theory and practice. The GGKP offers practitioners and policymakers policy guidance, good practices, tools, and data necessary to support the transition to a green economy. The target audience are mainly policy makers and academics and not the general public, or implementers. The target group of stakeholders does not directly relate to SAICM as this platform is focused on green growth; however, many publications refer to green economy tools and green economy measures that pertain to chemicals management and emerging policy issues.

⁸³ <http://www.scpclearinghouse.org/about/what-scp>

⁸⁴ <http://www.greengrowthknowledge.org/learning>

The platform has drawn together over 2,600 knowledge products from more than 400 organizations. Their resource library draws together the largest existing collection of green growth reports, articles, books, and other publications produced by leading institutions and experts. By the end of 2015, the Library contained over 1200 publications, tagged by country, region, sector, theme, and organization. Along with the resource library, the platform also has global databases on best practices, learning products (such as webinars, platforms and tools, courses, etc), project database of on the ground initiatives, a data visualization tool based on indicators or country, and Big-E (Batumi Initiative on Green Economy) commitments made in the Pan-European region. From 2014-2015, there were 90,078 visits and 224,303 total page views, from 203 countries. The most accessed area of the web platform is the GGKP Resource Library.

BRS Joint Clearinghouse Mechanism⁸⁵: The joint clearinghouse mechanism promotes, facilitates, and undertakes the identification, generation, collection, management, distribution, and exchange of quality information and expertise to support parties and other stakeholders in the implementation of the Basel, Rotterdam, and Stockholm conventions. This clearinghouse is a summary of information of the Basel, Rotterdam, and Stockholm Conventions. There are country profiles, mechanism strategies, information on partners, contact information, and updated information on news and meetings as it relates to the conventions. As for resourcing, there are three components in the provision of information that make up the clearinghouse mechanism: 1) *information capital* that is technical and scientific information relevant to projects and implementation activities undertaken by different convention stakeholders while embracing open data principles. 2) *human capital* component where they select information providers based on criteria for information quality, relevance, and established partnership by the conventions 3) *operational capital* is the information and communication tools, products, and services that are included into the website. For 2015- 2016 the site received 10,074 visits.

MapX⁸⁶: Supported by the World Bank, UN Environment and the Global Resource Information Database (GRID-Geneva), MapX aims to capitalize on the use of new digital technologies and cloud computing in the sustainable management of natural resources. MapX evolved from an initial focus on extractive resource to include a range of different resource types and themes, based on geo-reference datasets. The MapX engagement process focuses on generating actionable insight from geospatial data to inform dialogue and help stakeholders understand benefits and risks, manage expectations and take evidence-based decisions. Examples include informing national biodiversity planning and reporting to strengthen implementation of the SDGs involving UNDP, supporting country reports to the Stockholm Convention on POPs, and support for National Action Plans under the Minamata Convention on Mercury). SAICM stakeholders similarly require a country-focused way to report and present progress in order to build commitment and generate political and stakeholder buy-in.

IOMC⁸⁷: The IOMC brings together nine UN and multilateral organizations that are involved in the coordination and promotion of chemical safety and sound management. The IOMC website summarizes IOMC indicators of progress in implementing SAICM, country profiles and IOMC member projects at a national level, and the IOMC Toolbox for Decision making in chemicals management that enables countries to identify the most relevant and efficient tools to address specific national problems in chemicals management. Participating organizations are

⁸⁵ <http://www.brsmeas.org/?tabid=4466>

⁸⁶ <https://www.mapx.org/>

⁸⁷ <http://www.who.int/iomc/en/>

responsible for the information displayed on the site and there is no participation from outside stakeholders. The most underutilized of all platforms reviewed, from March 2017 – October 2017, the IOMC website received 1917 total visits. The IOMC Toolbox received an average of 224 monthly visits between April- September 2017.

3) Proposed alternative scenario (GEF focal area⁸⁸ strategies, with a brief description of expected outcomes and components of the project)

The GEF-6 chemical and waste strategy's long-term goal is **to prevent the exposure of humans and the environment to harmful chemicals and waste of global importance**, including POPs, mercury and ozone depleting substances, through a significant reduction in the production, use, consumption and emissions/releases of those chemicals and waste⁸⁹.

The Overall Orientation and Guidance endorsed at ICCM4 identified **increased risk reduction and information sharing efforts on emerging policy issues** as one of the six core activity areas to be addressed in the lead up to 2020. This proposed alternative scenario is focused on **risk reduction (nationally and sub-regionally)** and **information sharing (globally)**. GEF resources are needed to take a coherent approach to the EPs, take stock and plan actions up to and beyond 2020. Without such funding the proposed activities are unlikely to be achieved in the critical period to 2020.

According to the GEF focal area strategy for chemicals and wastes in order to achieve transformational change and be effective in a global market GEF interventions need to seek closer integration with global supply chains. This should ensure that products crossing national borders are free of global priority substances that otherwise enter into markets and recycling chains. It is imperative that these interventions integrate the private sector more closely due to the primary role the sector has in the production and use of chemicals. Both Component 1 on Lead in Paint and Component 2 on Chemicals in Products have been designed in the context of global supply chains, and industry is fully involved, to ensure global benefits from project activities.

The activities proposed in this project are in line with GEF-6 Strategic Objective 1: *Develop the enabling conditions, tools and environment for the sound management of harmful chemicals and wastes*; and GEF-6 Strategic Objective 2: *Reduce the prevalence of harmful chemicals and waste and support the implementation of clean alternative technologies/substances*.

Specifically the project will contribute to the GEF 6 C&W Program 1 (*Develop and demonstrate new tools and economic approaches for managing harmful chemicals and waste in a sound manner*) via the development and piloting of new tools and guidance on market-based and economic tools to promote phase out of hazardous chemicals in supply chains (namely sustainable public procurement and green mortgages in Component 2). The project also contributes to the GEF 6 Program 3 (*reduce and eliminate POPs*) by addressing the use of POPs chemicals of concern that are still used in building products, toys and electronics. Please refer to Table 1 in the baseline section for a list of specific POPs that will be addressed. Finally the project contributes to GEF-6

⁸⁸ For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives

and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving.

⁸⁹ GEF-6 Programming directions: <https://www.thegef.org/sites/default/files/documents/GEF-6%20Programming%20Directions.pdf> (Accessed 9 January 2018)

Program 6 (support regional approaches to eliminate and reduce harmful chemicals and waste in LDCs and SIDS) where the project will work with a number of LDC and SIDS to eliminate lead in paint including through the regional economic commission in West Africa; and support the deployment of safe alternatives to lead additives currently used in paints.

The overall project objective is to accelerate progress in control of EPIs by governments and value chains, by promoting the phase out and replacement of hazardous chemicals in paint, building products, electronics and toys. Upstream actions by governments and value chain actors to replace priority chemicals in supply chains and products will reduce worker and consumer exposure, and environmental releases during manufacture and at end of life. This directly contributes to the 2020 SAICM Goal of ensuring that “chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health”.

The following subsections outline the proposed components.

Component 1: Promoting regulatory and voluntary action by government and industry to phase out lead in paint

The project outcome is for 40 countries to regulate to establish legal limits to lead paint; and for at least 50 SME paint manufacturers in eight countries to phase out lead from their production processes (see logical framework in Annex A). Through nationally focused interventions (Output 1.1), project activities will work with SMEs to demonstrate the replacement of lead paint to non-lead alternatives using BAT/BEP. Experiences will be shared across subregions. Through a globally coordinated approach with governments and regional standard setting organizations (Output 1.2) the project will accelerate the adoption of legal limits to lead in paint.

Output 1.1 Demonstration pilots with paint manufacturers in Small and Medium Sized enterprises (SMEs) executed in eight countries

This output addresses the technical barriers faced by SMEs in replacing lead additives in paint with lead free alternatives (see section on Barriers and Root Causes). It focuses on seven countries with SMEs producing lead paint: Jordan, Ecuador, Indonesia, Peru, Colombia, China, and Nigeria. In Ecuador, Peru, Colombia, China and Jordan the project will work through NCPCs to provide assistance to SMEs on phasing out lead in paint. In Nigeria and Indonesia, the project will work through IPEN partner organisations SraDev and Balifokus respectively. An eighth project covered entirely through cofinance in Tunisia will follow a similar approach focusing on industrial anti-corrosive paints, including tailored technical guidelines and dissemination, and a Small Scale Trade Fair Event for suppliers and SMEs.

Activities in this output address the technical barriers faced by SMEs in phasing out lead paint production in favour of less hazardous alternatives, as well as supporting governments in regulating lead paint. Specifically, the project will result in:

1.1.1 National baseline information – Paint market information collection and analysis:

- Collect of all existing information on lead paint in the country, such as production, consumption, import and export.
- Collate a list of paint manufacturers and vendors, volumes, specifics on lead additives.

- In limited cases, perform testing and analysis of paint samples (industrial and decorative), or identify companies that disclose that they use lead additives.
- Compilation of findings of the national baseline information.
- Based on the national baseline information, select SMEs currently using lead additives in their paint products for the pilot demonstrations.
- Engagement with ministries, SMEs, paint manufacturers “champions”, suppliers of lead-free alternatives, paint associations, accredited laboratories, and other stakeholders to request co-finance letters.
- Meetings to promote stakeholder dialogue of LP controls involving national industry and other stakeholders.

1.1.2 Raise awareness with SMEs

- Design and disseminate awareness and information materials on a regular basis using all forms of print or broadcast communication.
- Organize annual activities during the International Lead Poisoning Prevention Week and at other relevant times as needed.
- Organize workshops to promote the need for legislation and BAT/BEP.
- Coordinate outreach and awareness activities with output 1.2.

1.1.3 Provide policy advice on legal limits to national and local governments in coordination with output 1.2

- Share national baseline information about the national paint industry and technical advice with national government.
- Engage government to promote legislation and provide support to draft laws and regulations in coordination and with support from ABA-ROLI and other partners as per the approach described in output 1.2
- Provision of information technical issues related to the paint industry to output 1.2.
- Provision of Input/advice/advocacy to get lead paint on relevant meetings and conference agendas.
- Facilitate engagement or establishment of a National inter-agency/coordinating committee on lead.

1.1.4 Alternative supplier events

- Provide details of national/regional alternative suppliers contact details to SMEs.
- Facilitate “alternative suppliers-paint manufacturer” events or meet-ups.
- Facilitate demonstration pilots from alternatives suppliers directed to SMEs.

1.1.5 Paint reformulation in pilot demonstration(s) project

- In depth assessment in the selected SMEs through interviews and field visits (using a template to be provided by Serbia NCPC) regarding their installed capacity, paint products containing lead, leaded paint ingredients currently used, paint ingredients properties, alternatives/approaches/suppliers available for the company, paint formulas, among others.
- Facilitation of cooperation with paint additive suppliers to provide individualized aid in creating a paint formula to substitute lead-additives with alternatives in a cost-effective manner.
- Dissemination information and to work with the supplier to provide training among workers and management staff.
- Conduct a follow up of the reformulated paint in the SMEs by conducting paint sampling and testing.

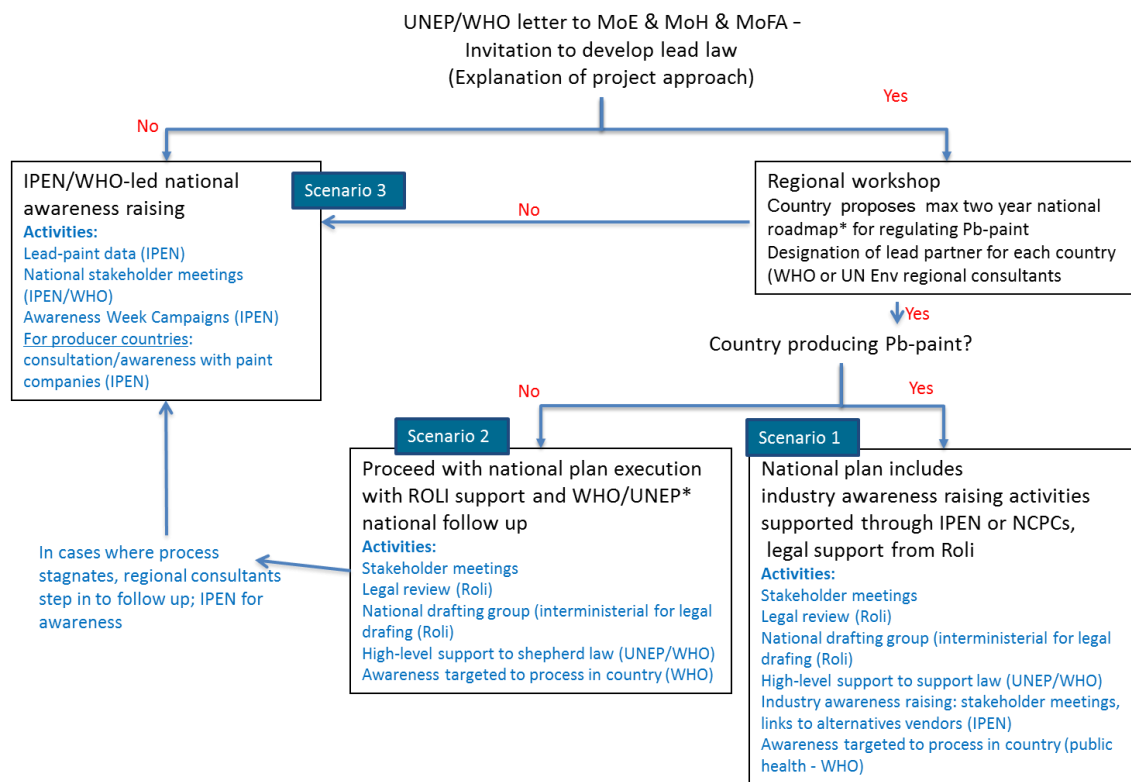
1.1.6 Disseminate technical information

- Generic BAT/BEP technical guidance provided by Serbia NCPC, tailored to the individual pilot country needs.
- National meetings (face to face or virtually) convened with participating stakeholders to validate the tailored BAT/BEP technical guidance
- Regional stakeholder workshops to share the final BAT/BEP guidance provided by Serbia NCPC.
- BAT/BEP guidance and information from the project nationally and internationally through the NCPC network and with governments and other stakeholders through project output 1.2.

Output 1.2 Policy support and awareness raising generate support for lead phase out

This output addresses the capacity barriers faced by countries in regulating lead in paint (see section on Barriers and Root Causes). The policy support to be provided on lead phase out will be jointly provided by UN Environment and WHO under their respective mandates to assist developing country governments in regulating lead paint. In countries where the Ministry of Environment is designated to take the lead, UN Environment will be the key executing partner. In countries with the Ministry of Health is designated to lead regulatory activities, WHO will take the lead. It is expected these ministries will establish inter-ministerial drafting groups that will include the Ministry of Foreign Affairs, Industry and Bureau of Standards. Executing partners UN Environment and WHO will be supported by ABA-ROLI, with their expertise in legal review and drafting, and IPEN, in awareness raising activities. The aim of the activities described below is to achieve lead paint regulation in at least 40 of the 70 identified target countries, by the end of the project. The methodology for this output is based on a decision tree approach, which models the potential scenarios the project partner anticipate they will encounter in the 70 countries. Countries ready to move quickly will be offered a fast track approach, that is, they will be provided the format for the roadmap in advance of the regional workshop, and once this has been received and reviewed by UN Environment, access to legal expertise. The decision tree is included below as Figure 3.

Figure 3: Decision tree for development and delivery of national level activities to promote lead paint legislation



* Depending on which ministry takes the lead for the national plan/ legislation, either UNEP or WHO will be the first point of contact

Specifically, under Output 1.2 the project will undertake the following activities:

1.2.1 High level communication: UN Environment/WHO will write to MoE and MoH and Ministry of Foreign Affairs (MoFA), referencing the relevant governing body resolutions, formally inviting countries to participate in the project to eliminate lead paint. The letter will include an invitation for representatives to a regional workshop.

1.2.2 Convene regional workshops: At regional workshops, countries will be briefed on the issue of lead paint, and then formulate national 2-year project roadmap based on a template proposed by the project. Each country roadmap will be firmly grounded in national context and processes and supported by an appropriate lead partner (UN Environment, WHO) for each country if requested by the country. Lead partners are dependent on national situation in terms of which ministry is responsible for regulating lead paint. Countries with leadership from the health ministry leadership may be partnered with WHO. Countries with environment ministry leadership may be partnered with UN Environment. National project plans will be simple, limited in scope, and include a timeline for action, and designated national actors.

1.2.3 National-level activities: Will be based on the national roadmap by countries and may include the following items. The partners mentioned below are available for technical support upon request by the countries

- Stakeholder meetings, to raise awareness on lead paint in each country.

- Interministerial meetings, to establish interministerial working group, and ensure broad national buy-in to regulatory reform on lead paint.
- National legal review, facilitated by with ABA-ROLI to ensure proposed regulatory activity is appropriately nested within existing national regulatory framework.
- National drafting meetings, facilitated by ABA-ROLI and WHO/UN Environment.
- High level support and coordination meetings (refer Figure 3: Scenario 1 and 2 countries: ABA-ROLI, WHO, UN Environment and ECOWAS).
- Industry awareness raising events (Scenario 1 and relevant Scenario 3 countries), led by IPEN.
- Public health awareness raising, led by WHO (Scenario 1 and 2 countries)
- Lead paint awareness campaigns (Scenario 3 countries) (IPEN)

1.2.4 Regional activities in the ECOWAS region: additional support to facilitate development and adoption of a regional standard (see flowchart in Baseline section), including meeting of the Technical Harmonisation Committee. Specifically, this will include the following:

- A Technical Harmonisation Committee (THC), meeting to register lead paint in their programme: review draft law (e.g. based on Model Law)
- A public enquiry, including a 60 day consultation period in each member state, and THC meeting to review submissions
- National Standard Bodies, vote on draft standard document voted on by national bodies. The proposal is accepted if 75% of national bodies support it
- A meeting of the Technical Management Committee, which meets twice a year (cofinance contribution), to finalize standard
- Presentation to ECOWAS Parliament, adoption by Council of Ministers, notified to Member States and replaces previous regulations

Component 2: Lifecycle management of chemicals present in products

The project will accelerate the adoption of measures by governments and value chains to track and control chemicals in supply chains for building products, electronics and toys. It will address the three barriers identified earlier, namely creating demand-led and market-based incentives for supply chains to act via public procurement and sustainable finance measures; developing quantitative life cycle assessment tools to compare chemical alternatives and avoid regrettable substitutions; and enhancing the ambition of and compliance with regulatory requirements on CoC.

The component is structured in two outputs: one on development of global level guidance and tools (Output 2.1) and a second on roll out of these in pilot projects and demonstration to companies in the three sectors (Output 2.2).

Output 2.1: New tools and guidance to reduce the use of chemicals of concern (CoC) in the building, electronics and toys sectors

This output will respond to the barrier of lack of incentives for the adoption of mechanisms and tools to track and manage hazardous chemicals in the three sectors. It will develop quantitative analysis of chemical impacts using the USEtox LCA model, and apply results from the model to guide the development of technical specifications for chemicals within Sustainable Public Procurement guidelines, finance mechanisms, and circular

economy reviews. The following table maps the proposed activities by sector to the three barriers that will be addressed:

Barrier and proposed intervention	Building products	Electronics	Toys
Avoid regrettable substitutions: life cycle assessment	USEtox – Sri Lanka (Activity 2.1.1)		USEtox – China (Activity 2.1.1)
Incentives for value chains to act a) Sustainable public procurement b) Sustainable finance	Sri Lanka Green Building Code (Activity 2.1.2) Green mortgages Sri Lanka (Activity 2.1.3)	Colombia procurement code (Activity 2.1.2)	
Promote regulatory compliance: regional and national reviews		Regional circular electronics studies (Activity 2.1.4)	Toy safety policies and standard (Activity 2.1.5)

2.1.1 Life Cycle Assessment: This activity will further develop the USEtox prototype model for near-field exposure modelling for building products and toys, drawing on expertise and data on CoC and alternatives from the scientific community and building and toy sector supply chains. The activity includes the adaptation of the existing USEtox model to include children's exposure routes unique to toys. It will refine and apply the model working with Chinese toy manufacturers to phase out toxic chemicals in toys.

- Identification of CoC, their functional uses, product descriptions and alternatives
 - Building products: review of chemicals in insulation materials, coatings, carpets, furniture). Development of a global information hub on roll-out of alternatives by the building sector, to be integrated into the CiP Platform (link with Component 3 on KM). *Chemicals & Health Branch (CHB), USEtox, and companies in the sector, via the CiP Programme*
 - Toys: Review of Chinese regulations on chemicals concentrations allowed in toys and testing of toys to assess compliance, confirm baseline findings and identify other hazardous chemicals that may be present in plastic toys, and calculation of a material flow model for plastic inputs into toys, reflecting the use of recycled plastic and possible contamination of finished products (China BCRC)
- Further refine the adapted USEtox prototype near-field product exposure model:
 - Building sector: adding additional pathways and toxicology data from international sources and research (e.g. from USEPA, ECHA).
 - Toys: include mouthing and dermal contact pathways for children, including compiling data on chemicals of concern commonly used in plastic toys, and alternatives that exist in the Chinese market (USEtox initiative with input from China BCRC and consultation with toy manufacturers);
- Seek consensus for formal inclusion in the USEtox model from industry, public sector and scientific stakeholders via documentation of all adaptations, peer review and publication of the model

2.1.2 Sustainable Public Procurement: The UN Environment Resources and Markets Branch (RMB) will develop global guidance on setting criteria within sustainable public procurement processes and standards to avoid certain hazardous chemicals in key building and electronics products.

- Develop global guidance for Sustainable Public Procurement defining technical CoC specifications for purchasing building products and electronics. Criteria and scope for the guidelines will be developed based on life cycle analysis, to ensure multi-criteria analysis of possible alternatives, and to consider both near field and far field impacts (indoor air quality, workers exposure, water, other resources, greenhouse gas emissions, air pollutants). Technical details will include sub-sector technical information, methodological guidance to private sector manufacturers for compliance, and feedback from implementation. *(RMB, consultants)*
- National SPP guidance and updated tools:
 - NCPC Colombia complete cost/ benefits analysis for purchase of identified products, including information on existing procurement (energy*), estimation of purchasing power, and impacts on Colombian industry/manufacturers, and consult with government and non-government stakeholders to adapt the global SPP guidance for Colombia and integrate CoC specification into the existing national SPP practices for electronics *(Colombia NCPC)*
 - Sri Lanka Green Building Council (GBC) update the building products SPP documents / specifications developed under the SWITCH Asia project, with information on chemicals from USEtox *(Sri Lanka GBC)*
 - Develop local technical specifications related to CoC, based on global SPP guidance, to cover a) private sector purchases through integration of CoC criteria into the SL Green Building Council operations and certifications; and b) public-sector procurement through integration in the green procurement practices related to the construction sector *(Sri Lanka GBC)*
- Present and communicate the guidelines and case studies to international stakeholders and audiences to build consensus around the guidance and ensue its visibility and adoption (incl. UNFI, Sustainable Buildings and Construction Programme of the 10YFP, GABC, SAICM) *(RMB)*

2.1.3 Developing the Sri Lankan Green Mortgage Market; In addition to sustainable public procurement, the project will also address private sector purchases via explicitly linking the revised Green Building Code CoC requirements into the mortgage sector. The project will support the development of guidance and tools to promote construction or retail finance for green certified buildings and /or green certified building products) in Sri Lanka (green mortgages). The following activities will be overseen by the multi-stakeholder group and working groups including the central bank, public and private banks and others including the Sri Lanka NCPC and GBC.

- Adapt the UNEP Finance Initiative’s Environmental and Social Risk Analysis Training Programme⁹⁰ on establishing and implementing effective environmental and social risk management systems within bank to the Sri Lankan context and add a module on green mortgages. The training programme is essential for banks with no or little experience in sustainable finance.
- The new green mortgages guide will serve as the basis for the green mortgages module, and be based on research on the market development needs for green mortgages covering issue such as sources of wholesale capital to banks; standards and validation processes; product structure to overcome first-cost barriers; supply chain development, etc.

2.1.4 Regional studies on life cycle management of electronics : This activity will support the development of circular approaches for management of electronics, through global and regional reviews which will complement existing work already done for Africa and Asia, and provide strategic overviews of the capacity and models that exist for sustainable management of electronics from manufacture to disposal. Regional electronics lifecycle

⁹⁰ <http://www.unepfi.org/training/training/esra/>

studies completed in two regions (LAC and CEE). The two studies would have a similar remit, looking at lifecycle management of electronics, led by partners based in the respective regions, and the UNEP partners providing technical support and coordinating a process of peer review by CiP and project partners, including civil society and industry.

- Extended Producer Responsibility schemes, and waste management capacity for environmentally sound recycling/ disposal, proposing considerations and recommendations for promoting a circular economy approach for electronics (*UNEP-RMB, with partners where possible e.g. the Colombian NCPC for LAC region*)
- Review of LMIC legislative and regulatory approaches for prohibiting the use of CoC, including transposition of RoHS (*UNEP-CHB*)
- Consolidation of a diverse range of tools and ecolabels on green electronics, focusing on how they treat CoC and further defining a common set of technical specifications for purchasing electronics products, based on global harmonized label or list. This would include a study on Chemicals Management Common Criteria Standard for electronics to develop a voluntary consensus standard would be developed leveraging existing corporate level chemicals management criteria found in standards globally. It would provide a “baseline” of corporate chemicals management activities and would prompt a discussion on the differences between sector approaches to chemicals management, as illustrated in VCS standards, and how sectors can learn from each other (*Green Electronics Council*)

2.1.5 Toy safety policies and voluntary standard - This activity will produce global impact by engaging the toy manufacturing sector in China, which produces 80% of the world’s toys, and explicitly linking issues of chemicals of concern with toy safety regulations and major retailers in importing countries. The project will engage with export markets in LMIC receiving Chinese toys, to strengthen toy safety policies and create additional incentives for toy manufacturers to report and reduce the presence of hazardous chemicals in their products.

- Review of toy safety policies and regulations, including testing for CoC where relevant, in LMIC importing toys from China (*CHB*)
- Development of training and audit package for first steps toward phase out of CoC in toys, developed in cooperation with existing membership organizations including toy associations with standards and processes to align with existing toy safety regulations (e.g. EU, US)

Output 2.2: Training and support for government and value chain actors to trial and adopt new guidance and tools

2.2.1 Validation and adoption of USEtox model by building product and toy sectors in Asia: working with manufacturers of building projects in Sri Lanka, and toy manufacturers in China, to test the revised USEtox model and demonstrate its use in product design processes and assess alternative chemicals.

- Identify companies in Sri Lanka and China Asia that produce building products (priority categories including insulation materials and coatings) and plastic toys, to validate the USEtox prototype models with specific data on product composition, to test the model in real case study scenarios, and build capacity to use LCA tools including via short courses and / or summer school being organized in Singapore for 2019 (*USEtox, national partners*)
- Case study roll-out of the new tool with industry partners and retailers (see below) via industrial intensive training courses on site, via webinars, and USEtox+ summer school organized in Asia with emphasis on near-field exposures (*USEtox*).

2.2.2 Sustainable Public Procurement and Sustainable Finance pilot projects (Colombia, Sri Lanka): reviewing an existing national SPP policy and creating the conditions for an effective implementation of the policy including working with suppliers.

- Colombia: Roll out of national public procurement policy for electronics, including assisting public entities in implementing purchases processes with CoC-specific sustainability criteria; national ecolabel aligning with SPP requirements, or other means, to meet the demand from public sector (*NCPC Colombia*);
- Colombia: Awareness raising of companies to inform about the SPP new requirements and timeline, as well as lifecycle impacts of electronic products, and SMEs capacity building to be part of the supply chain and meet these new requirements. Training and events will ensure that women and representatives of SMEs are proactively invited as participants and presenters/ trainers.
- Sri Lanka: propose amendments to the National Green Building Code, based on best practices elsewhere (Brazil/ Colombia) and the results of the LCA. Activities will be stewarded by a national multistakeholder group (see also Activity 2.1.4) and include Roll out of revised standard, engaging companies, informing about the newly integrated criteria, and related timeline, and support to upstream product manufacturing processes and purchasing through training, assistance in sourcing alternatives, eco-innovation and supporting new business models (*Sri Lanka GBC and NCPC*)
- Sri Lanka: Promotion of the upgraded ESRA and Sri Lanka Green Building Code/ GREEN building product label with national stakeholders, including three sessions for practitioners (bank risk managers and credit analysts, financial regulators and financial journalists); wider stakeholders (bank customers, Green Building Council stakeholders, policy makers, business journalists, civil society, etc); and a High-level session (CEOs and board members together with senior regulators). The project will also involve the Colombo Stock Exchange which is a member of the UN Sustainable Stock Exchange Initiative which is co-convened by UNEP Finance Initiative.⁹¹ (*UNEP Finance Initiative and Sri Lanka GBC*)

2.2.3 Training and consultations on regulatory and compliance approaches for toys and electronics sectors: This activity will roll out the training packages developed for toys in China, and engage Chinese and international regulators and value chain actors to share information on CoC tracking approaches and results; and consult on the development of voluntary industry-led reporting tools for both toys and electronics.

- Piloting toy manufacture auditing and chemicals reporting tools for Chinese toy manufacturers who are currently using CoC. Audit results and reports published on CiP platform (*CHB*);
- Sustainable toys multistakeholder workshop, targeting manufacturers, retailers and governments in key LMIC import markets, to review legislation, share data on product testing and recalls, propose networks/ modalities to promote common standards (*CHB*);
- International electronics regulations/ RoHS consultation: bringing together electronics producers and countries using RoHS, with the objective to further explore how the regional studies can be used to develop an industry-supported international voluntary consensus standard for circular electronics (*CHB/ RMB*)

Component 3 – Knowledge management and stakeholder engagement

⁹¹ <http://www.sseinitiative.org/fact-sheet/colombo-stock-exchange/>

The objective of the Component is for countries and other stakeholders to access up to date information produced by the project and other stakeholders on the EPIs, and actively contribute to communities of practice for peer-to-peer learning exchanges, to support decision making and development of new initiatives towards the 2020 SAICM goal and in line with the 2030 Agenda. The project directly addresses the barriers identified, by supporting stakeholders to tell compelling stories and present their information in the most impactful way (Output 3.1) and providing a single point of reference for this material (Output 3.2). The KM Platform will address all of the EPIs, also serving a related SAICM GEF Medium Size Project on highly hazardous pesticides, endocrine disrupting chemicals and environmentally persistent pharmaceutical products.

Output 3.1 Collaboration and engagement with the SDG agenda and scientific community to promote EPIs

This output seeks to establish an effective global network of EPI experts in a community of practice, and responds to the identified barrier of the lack of country and context-specific data on EPIs. It will lead to engagement of stakeholders from other sectors and agendas to integrate chemicals management issues into their approaches and development of joint initiatives or projects.

SAICM outreach will be enhanced and linked with the 2030 Agenda through the following activities:

- Production of strategic outreach papers and materials – including six policy briefs on SDGs 2,3,6, 11, 12; five thematic papers on water, cities, science etc; a gender review mapping EPIs and identifying gender priorities; and an indicators mapping paper reviewing contribution of EPIs to indicators of progress/ impact,
- SAICM presentations made at international policy and scientific events – including five presentations at scientific community events, and ten at related policy events (biodiversity, cities, food systems etc)
- Convening of side events at OEWG and ICCM5 with active engagement of academia and the scientific community on EPIs and SDGs – including two project side events at OEWG3 and ICCM5, and 12 communications/ content pieces on HHPs, EDC/EPPPs, Lead paint, and CiP

Output 3.2 Knowledge Management platform provides a repository of information and forum for exchange of scientific and policy information

This output seeks to improve knowledge management, by providing a space for knowledge exchange instruments, and long-term engagement through active communities of practice on emerging policy issues. The platform will facilitate the tracking of data and progress on EPIs at a regional, national and global level. It will also ensure knowledge is accessible to stakeholders. This output responds directly to concerns raised by stakeholders on the insufficient sharing and dissemination of good practices from countries, regions and stakeholders. Activities on developing and compiling knowledge and content, and on establishing the architecture of the knowledge platform will be undertaken concurrently.

3.2.1 Developing new content – in close coordination with SAICM stakeholders including IOMC partners, civil society, and science/research stakeholders, activities include:

- SAICM Knowledge Management Strategy, completed in a participatory way, with input from SAICM stakeholders

- Knowledge exchange instruments featured on the Platform – including technical content on EPIs produced and submitted by project components (on HHP, EDC/EPPPs [from related MSP]; and lead paint and CiP); 50 knowledge exchange instruments, including maps and visual tools;
- Communities of practice – established and moderated for each project EPI (four in total)

3.2.2 Developing platform - Activities for SAICM Knowledge Management Platform:

- Dynamic Knowledge Management Platform developed – completed through a contract in place with web architecture service provider(s) for an integrated platform including spatial and non-spatial data. Platform will include technical provision for maps and visual tools, and user engagement through Communities of Practice. The platform will be user tested, and stakeholders consulted at OEWG3.

4) Incremental/additional cost reasoning (expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and co-financing;))

Without GEF assistance, international activities on Emerging Policy Issues identified under SAICM are likely to remain uncoordinated, incoherent and ineffective. GEF assistance will ensure SAICM can provide guidance and leadership on EPIs, support developing ‘champion’ countries in addressing these issues in a coordinated and effective manner and, share lessons learned and knowledge with other countries.

Component 1 builds on the significant work of the Alliance and key NCPCs to ensure GEF funds are used in a truly incremental manner. The Alliance is well established, with agreed goals and a Business Plan to which all the member organizations are committed and significant experience and baseline tools and resources already developed (including Week of Action communication materials and advocacy and technical guidance such as the Model Law). These achievements and resources form the basis of the project and represent a significant saving in terms of development of tools, allowing the project to focus resources on country rollout. The NCPCs involved in this project represent established, government endorsed, technically competent organizations, with a long track record of collaborating with the private sector and promoting cleaner production. By leveraging of this experience in this project the GEF funds are being used in a truly incremental manner. In addition, the two IPEN participating organizations, BaliFokus, and SRADev have significant experience in addressing lead paint in Indonesia and Nigeria respectively, meaning the funding provided to these organizations to continue engaging the private sector is truly incremental.

Component 2 similarly builds on significant existing initiatives by a particularly diverse group of stakeholders in the three sectors. The CHB CiP programme, established by the ICCM to lead work on CiP has developed a rich baseline of information on tools and approaches, largely by global brands, and has a strong network of private sector companies which may be considered leaders in their respective sectors, including the members of the CiP Steering Group who have been actively engaged during the PPG phase.

The USEtox model and its consensus-driven and inclusive governance setup has been a major initiative of UN Environment over the last years, and the development of the prototype model for near-field exposure modelling for building products in addition to the far-field model has been under development for 4-5 years with investment in the millions of dollars from research funders. By using this well-established tool and its near-field prototype the project resources will be focused on value chain engagement and roll-out.

The selection of Sri Lanka and Colombia for the roll-out of the SPP pilots was largely based on the prior experience and existence of key baseline resources in those countries, and proactive engagement both by the NCPC and GBCSL but also their respective government partners (procurement services). Resources available for final review and roll-out in the pilots include the existing review of CoC in electronics products for Colombia and the Sri Lanka National Green Building Code. While these require update and expansion to be more comprehensive on CoC, they represent an important 'head start' for the project in terms of stakeholder awareness and engagement as well as the technical documents themselves. The RMB will also be able to call upon the wider RECP network as a rich source of experience of SPP and toxics in LMIC, such as the Brazilian standards on electronics and building products.

Component 3 aims to establish an information repository for the sound management of chemicals, and a knowledge hub, where countries and other stakeholders can access up to date information, and join communities of practice for peer-to-peer learning exchanges. Incrementally, this builds on the information contained in the SAICM Clearinghouse, but brings it into a dynamic, accessible and useable platform.

5) Global environmental benefits

Humans and ecosystems are simultaneously exposed to multiple combinations of chemicals, multiplying uncertainty around impacts of exposure to individual chemicals. Many chemicals may feature in one or more categories. In this context, the chemical-by-chemical regulatory approach is increasingly unable to address the global environmental and health risks posed by these chemicals. The project will deliver the integrated, collaborative and multi-stakeholder approach needed.

In Component 1, the project will result in lead paint controls in 40 countries, and work directly with the paint industry in seven pilot countries to substitute lead paint formulations for less hazardous alternatives. Through Component 2, the project will develop and demonstrate new tools for managing harmful chemicals and waste in a sound manner. Component 3 involves the development of Knowledge Management Platform to help ensure that other stakeholders, including non-pilot countries, can benefit from project activities.

The project will help generate much-needed sex-disaggregated data, include gender analysis of user behaviour, and developing effective tools for specific target groups.

6) Innovativeness, sustainability and potential for scaling up

Component 1 aims to achieve regulatory action banning lead paint in 40 countries. It represents the largest concerted effort to address lead paint undertaken to date, and will involve activities in over 70 countries. The preparatory phase of this project involved a robust review of the national evolution, of lead paint laws, and is proposing activities targeted to countries' specific placement in this framework.

The design of the project builds on the back of significant international momentum to ban lead paint globally by 2020. All project resources developed will be made available to other countries. The proposed methodology will be further refined during project execution, and documented to facilitate scale up.

The project also includes significant investment in the involvement of the private sector, through the NCPCs. NCPCs are uniquely positioned to provide support, and the project will develop technical resources that can be

taken up by other NCPCs, ensuring widespread support for SMEs attempted to formulate lead free paint. Global paint industry companies and stakeholders also support the project demonstration activities.

Component 2 focuses on three specific CiP areas: buildings, toys, and electronics. In each sector the project aims to develop global guidance, to be made available and used by SAICM stakeholders, and pilot activities, to provide concrete examples and case studies at the national level. These national case studies will be made available through the Knowledge Management Platform in Component 3.

Component 3 establishes a dynamic Knowledge Management Platform including communities of practice and peer-to-peer learning. The innovative framework for this Platform has been designed with sustainability and scale-up of SAICM activities to be maximized.

The effective collaboration between numerous members of the IOMC will require close working relationships that will provide the conditions for sustainability and scaling up in the future. The close integration with the SAICM structure and mandate, especially in terms of strategic planning, monitoring progress, and knowledge sharing, means that project outputs in terms of knowledge management platforms, M&E systems, and strategic plans, will be designed and developed in a way that allows them to be adopted as future SAICM resources and ensure sustainability and scale-up. For example, the knowledge management platforms and systems developed can be used for further development of the SAICM Information Clearing House which is one of the responsibilities of the SAICM Secretariat.

A.2. Child Project? If this is a child project under a program, describe how the components contribute to the overall program impact.

NA

A.3. Stakeholders. Identify key stakeholders and elaborate on how the key stakeholders engagement is incorporated in the preparation and implementation of the project. Do they include civil society organizations (yes /no)? and indigenous peoples (yes /no)?⁹²

STAKEHOLDER	Engagement in project preparation	Proposed engagement in project execution	Component/Output
International			
UN Environment	Implementing Agency (IA) coordinated the development and design of the project, and consult with stakeholders.	IA, will be responsible for implementing the project, and overseeing Executing Agency (SAICM).	All
SAICM Secretariat	Executing Agency (EA) cooperated with UN Environment on the design and development of the project, working in partnership with the IA to consult executing partners and develop activities.	EA responsible for execution of the project; timely and quality delivery by partners; reporting and coordination. EA will play the key executing role on component 3 of the project.	All
WHO	WHO jointly leads the Lead Paint Alliance and has driven the project design process during the PPG, including participation at the initial workshop and regular coordination calls. WHO was consulted for the knowledge management component.	WHO will be a key executing partner on LiP activities, notably supporting counties where MoH will be leading the national process to develop legislation and providing health advocacy where needed. WHO will contribute health content for knowledge management and lead discussion forums including technical/ thematic papers on specific health topics and infographics/ animations	Component 1 and 3
IPEN	IPEN is a member of the Lead Paint Alliance and has driven the project design process during the PPG, including participation at the initial workshop and regular coordination calls. IPEN was also consulted upon for the knowledge management component.	IPEN will be a key executing partner on LiP activities, notably supporting counties with lead paint manufacture where it will promote industry participation. IPEN will contribute content for knowledge management and lead discussion forums including technical/thematic papers on specific topics in particular for gender related issues.	Component 1 and 3
ABA ROLI	ABA-ROLI is a new partner for the Lead Paint Alliance and has driven the project design process during the PPG, including participation at the initial workshop and regular coordination calls	ABA-ROLI will be a key executing partner on LiP activities, notably providing legal assistance and support to countries in reviewing legal systems and drafting legislation based on the Model Law.	Component 1
US Environment Protection Agency	US EPA is the Chair of the Lead Paint Alliance and has driven the project design process during the PPG, including participation at the initial workshop and regular coordination calls	US EPA will be a key executing partner on LP activities, advising the partners on implementation issues and providing support with countries through its own programme of activities on LP.	Component 1
UN Environment	Attended LP and CiP PPG workshops and drove	CHB will be a key executing partner for both technical	Both

⁹² As per the GEF-6 Corporate Results Framework in the GEF Programming Directions and GEF-6 Gender Core Indicators in the Gender Equality Action Plan, provide information on these specific indicators on stakeholders (including civil society organization and indigenous peoples) and gender.

Chemicals and Health Branch	project design for both components.	components, providing both technical support and responsible for ensuring effective communication and convening partners for participatory management.	components 1 and 2.
UN Environment Resources and Markets Branch	Attended CiP PPG workshop and drove project design for Component 2.	RM branch will be a key executing partner for the CiP component, delivering technical activities on USEtox and SPP, and ensuring coordination of project activities in Colombia and Sri Lanka.	Component 2.
UN Environment Finance Initiative	Was consulted during the PPG and provided country baseline and proposal for Component 2	Will deliver project activities on the building sector in Sri Lanka including promoting green buildings in the finance and mortgages sector.	Component 2
Green Electronics Council	Was consulted during the PPG and provided sector baseline and proposal for Component 2	Will deliver their programme of cofinance activities in close collaboration with the project and share approaches and materials on ecolabels and certification with the Output 2.2 on electronics	Component 2
MapX, Global Green Knowledge Platform, SCP Clearing House, BRS Conventions	Were consulted during the PPG and provided guidance and technical input into the design of the KM platform architecture and concept, including the end-user focus in conceptualizing any KM system.	The project will develop and issue a call for proposals/ tender for the development of the software for the KM platform. One of these partners may be selected but	Component 3
University of Cape Town	Was consulted upon for the knowledge management component, including through email and phone calls	As described in their cofinance letter, University of Cape Town will contribute content for the knowledge management including to the discussion platforms and technical/thematic papers on specific topics, in particular for pesticides and agriculture.	Component 3
IISD	Was consulted upon for the knowledge management component, including through email and phone calls.	IISD will develop content for the knowledge management including technical/thematic papers on specific topics, in doing so creating linkages to the IISD SDG Knowledge Hub and its communities of practice.	Component 3
OECD, UNITAR, FAO, IOMC	Were consulted upon for the knowledge management component, including through email and phone calls and regular interaction with the IOMC.	Will deliver their programme of co-finance activities in close collaboration with the project, sharing knowledge content to the repository, developing thematic papers, contributing to the discussion platforms and linking related databases ⁹³ .	Component 3
ISC3	Was consulted upon for the knowledge management component, including through email and phone calls.	Will deliver their programme of co-finance activities in close collaboration with the project, sharing knowledge content to the repository, contributing to the discussion platforms and linking related databases. Common interest areas specifically include:	Component 3

⁹³ For example, the existing OECD PFOS portal will be linked to the Knowledge Management Platform (<http://www.oecd.org/chemicalsafety/portal-perfluorinated-chemicals/>)

		supporting engagement of organizations and universities in developing countries, particularly the ISC3 regional hubs, in undertaking research studies or other activities related to emerging issues. Furthermore, the ISC3 has annual themes that are of relevance to link in, for example this year's is 'Sustainable building and living' with a focus on plastics.	
ICCM5 Bureau	Was consulted upon at their meetings held during the PPG phase.	Will continue to be informed on project development and to provide guidance on implementation in moving forward.	All components
National			
NCPCs Jordan, Ecuador, Peru, China; SRADev Nigeria and BaliFokus Indonesia	Attended PPG workshop on lead paint and shared national experiences.	Will deliver project activities on LP demonstrations of BAT/BEP for phasing out lead paint production in SMEs.	Component 1
NCPC Colombia	Attended PPG workshops on LP and CiP and shared national experiences on both lead paint and sustainable public procurement.	NCPC Colombia will deliver project activities in Colombia on both LP and CiP, including working with SMEs to phase out lead paint production and with government to implement draft national SPP guidelines for electronics.	Components 1 and 2.
NCPC Serbia	Attended PPG workshop on lead paint, shared experiences and provided expert input into project design.	Will provide international technical expertise on BAT/BEP and coordinate work between NCPCs, ensuring consistency of approach, timeliness, and South-South cooperation, so that NCPCs can learn from each other. It is expected that NCPC Serbia will also provide support direct to SMEs on specific reformulation challenges.	Component 1
NCPC Sri Lanka and Green Building Council Sri Lanka	Was consulted during the PPG and provided country baseline and proposal for Component 2	Will deliver project activities on the building sector in Sri Lanka including testing and input to the USEtox model for building products and training of SMEs and suppliers to SPP processes.	Component 2
BCRC China	Was consulted during the PPG and provided country baseline and proposal for Component 2	Will deliver project activities on the tyos sector in China including testing and input to the USEtox model for toys and training of SMEs on national regulations on toy safety.	Component 2

A.4. Gender Equality and Women's Empowerment. Elaborate on how gender equality and women's empowerment issues are mainstreamed into the project implementation and monitoring, considering the differences, needs, roles and priorities of women and men. In addition, 1) did the project conduct a gender analysis during project preparation (yes /no)?; 2) did the project incorporate a gender responsive project results framework, including sex-disaggregated indicators (yes /no)?; and 3) what is the share of women and men direct beneficiaries (women min 30%, men 70%)?⁹⁴

Women's and men's bodies are affected differently by certain chemicals – exposure, risk, and impacts can be different between the sexes. Vulnerable groups, including women (especially women of child bearing age), children (especially unborn children), the elderly, people with immune disorders and highly exposed workers including in the informal sector such as subsistence farmers, experience differential vulnerability, biological responses and impacts of exposure to chemicals.

Gender is also a social category, and as such is linked to gender-specific norms of behaviour, roles in society as well as 'feminine' and 'masculine' identities, which in turn influence people's behaviour, including their relationship to the environment, their affectedness by environmental changes and degradation, and their access to and power over resources. The primary objective behind the gender mainstreaming approach proposed in this project is to ensure that project activities: do not reinforce existing gender inequalities (that is, are Gender Neutral); attempt to redress existing gender inequalities (that is, are Gender Sensitive); or, attempt to re-define women and men's gender roles and relations (Gender Positive / Transformative).

The SAICM Secretariat will seek periodic input from IPEN on aspects related to gender. In December 2017, UN Environment signed a Memorandum of Understanding (MoU). The aim of the MoU is to increase cooperation between IPEN and UN Environment to work on issues related to gender and chemicals, through a focus on the following areas: (a) raising awareness of the impact to women and children as vulnerable populations to the health effects linked to chemical exposures, including creating opportunities for training and experience sharing and collecting relevant sex disaggregated data; (b) Promoting women's engagement and leadership in decision making processes at national and global levels; (c) implementing and contributing to activities related to SAICM Emerging Policy Issues and other Issues of Concern as well as related chemicals conventions and relevant Sustainable Development Goals.

Overall, there is currently no reference to gender within core Strategic Approach texts, however women are highlighted in both their biological roles and social roles as key populations several times. The SAICM secretariat prepared a document on 'Gender and the sound management of chemicals and waste' for the second meeting of the intersessional process in Stockholm in March 2018⁹⁵. The document highlights that the 2030 Agenda for Sustainable Development and SDG 5 provide new and renewed opportunities to incorporate gender into decision-making. In designing the future framework for beyond 2020, all stakeholders have the opportunity to tap into the potential to address gender issues, promote equality and protect vulnerable populations in the context of sound managements of chemicals and waste. Results of this project will contribute into the discussion and decision-making related to the sound management of chemicals and waste beyond 2020.

⁹⁴ Same as footnote 8 above.

⁹⁵ http://www.saicm.org/Portals/12/documents/meetings/IP2/IP_2_6_gender_document.pdf

Gender cuts across all project components, and during the project preparation phase a gender review was undertaken, and proposed gender disaggregated indicators included in the Project logical framework. The specific ways in which gender is considered in each of the project components is outlined in the following paragraphs.

They mainly focus on:

- including relevant stakeholders, drawing on existing expertise and experience within and outside governments;
- providing target group specific information and materials and using specific outreach and engagement strategies where needed to inform and engage women and men; and
- building knowledge and expertise on gender in the SAICM realm of activities, while identifying data and knowledge gaps where they exist and encouraging research to address these gaps.

Specifically, the following activities related to gender, are included in each of the project components.

Under **Component 1** the following gender related activities are planned:

- mapping of stakeholders will include women's organisations and networks, and awareness raising with SMEs will include occupational health and user exposure risks disaggregated by sex/physical differences and differences due to gender roles, wherever possible and necessary;
- Inter-ministerial drafting group and stakeholder meetings will include gender equality related Ministries, Ministries for Women, or other governmental institutions. Stakeholder meetings will include women's organization and gender experts;
- Awareness raising activities developed will take into account expertise on women's and gender issues, e.g. through active outreach to women's organisations and gender experts and their inclusion in guiding and designing awareness raising activities with a view to target group specific messaging and engagement; and
- Outreach, messaging and engagement will include target group specific activities and materials as/if needed; best through advice from gender experts.

Under **Component 2**, the following gender related activities are planned:

- Stakeholders identified will include gender equality related Ministries or other governmental institutions as well as women's organisations and gender experts;
- Target group specific information, messaging and outreach, will be used, and testing completed to confirm it works to complete women and men;
- Review relevant research and take into account possible sex and gender differences (e.g. presentation at the workshop)

Under **Component 3**, the following gender related activities are planned:

- Capacity building activities such as workshops, webinars, training materials and programmes will include a gender perspective, bringing in women's organizations and gender experts and researchers;
- Gender review mapping of EPIs related to sex differences and gender differences; consultation with gender experts; and identifying data and knowledge gaps and research recommendations related to gender and EPIs;
- Ensuring equal participation by women in the Knowledge Management platform, in particular as presenters/ experts in the interactive Communities of Practice;

- Further developing existing SAICM work on gender and chemicals including producing a thematic paper on gender;
- Gender will be mainstreamed into all knowledge products as appropriate; products will be reviewed by gender experts; and user and perception testing will be undertaken.

These activities will be overseen by the Stakeholder Outreach Consultant, whose terms of reference will explicitly include development, monitoring and reporting of gender aspects of the project. They will be supported and guided by the Chemicals and Waste Branch Gender Focal Point who will ensure that gender activities are developed in line with wider UN rights-based approaches and best practices.

A.5 Risk. Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation. (table format acceptable):

RISK	RISK RANKING	MITIGATION MEASURES
Political will and attention to address voluntary EPIs	Low	Significant efforts will be made during the PPG phase to understand the needs of each participating country, and to broaden awareness of the project among stakeholders. In Component 1 the status of lead paint regulation has been assessed, and activities defined based on the current stage each country is at. A multistakeholder approach is being undertaken in Component 1, as evidence from recent projects indicates the need to build national momentum. The proposed decision tree process is country-driven with project resources directed on the basis of national roadmap needs set out by governments.
SMEs are unable/unwilling to phase out lead paint (Component 1)	Medium	The PPG involved extensive baseline data collection from SMEs in the selected countries, manufacturing paint containing lead, and consultations with these SMEs to ensure buy-in to project activities. There is strong buy-in to project activities, as consultations indicated there is a desire to phase out lead, but that support is needed to overcome technical barriers.
Limited government commitment and/or capacity to apply SPP guidance	Medium	The countries selected for the SPP guidance development and roll-out were selected on the basis of the proactive responses by the in-country partners (NCPs and GBC). These partners have excellent relations with government procurement services and well placed to follow up. The inclusion of a finance/ investment activity will also address this risk for the building sector by creating additional incentives for SPP.
USEtox model is not user-friendly for value chain actors	Medium	The LCA tool is likely to require some familiarity by users with modelling approaches. The project design provides for close engagement of manufacturers with the researchers throughout the process, starting from sharing of information on CoCs and alternatives they currently use. This will be supported by explicit capacity building and training sessions in the regions.
Lack of stakeholder,	Low	Stakeholders are actively engaged with the emerging issues addressed in

community and NGO interest in the project		this project. Project preparation workshops were convened for Component 1 and Component 2 and were both well attended by NGOs. These NGOs have remained active in the project document preparation.
Lack of investment and commitment by manufacturers, traders and user groups in phasing out CoC	Medium	The project has engaged industry partners via established partnerships including through the Chemicals in Products Programme and the RECP network. These partners have already demonstrated their commitment to cleaner production and gradual adoption of best practices for chemical management. The multi-stakeholder approach of SAICM additionally provides longer term incentives for users of chemicals to phase out CoC by simultaneously engaging governments to introduce regulatory as well as voluntary levers for engaging private sector partners.
Lack of collaboration between IOMC agencies, and other delivery partners	Medium	The large number of delivery partners involved may be difficult for the Executing Agency to manage. Close attention has been paid during the PPG to agree the detailed scope of activities for each partner, and with the IOMC as a whole, but also a coordinating mechanism for decision making by component, which gives each partner a strong voice in technical decision making.
Impacts of climate change on the project	Low	The project technical support partners will keep climate change risks under review on a country-by-country basis, once interventions have been defined and are being rolled out. As a global project will predominately policy level interventions and no field activities, extreme weather should not particularly affect activities. The issue of climate impacts on policies will be reviewed as part of the KM component.
Low or difficult access to internet in LMIC	High	The KM platform development will be based on the KM Strategy to be developed in the early stages of the project. This strategy will be developed in a participatory manner, including input from countries, and will propose measures to ensure accessibility of the information to all stakeholders. In addition to using diverse channels for knowledge exchange, including face to face, publications, and others, the KM platform can also be designed to be accessible via mobile phone as this may be more accessible for users in countries with poor internet.
Project delays caused by related MSP project not being executed/ on time	Medium	This project and the SAICM MSP project are linked and will be executed in an integrated manner particularly the production of content for the KM system, such that delays in delivery of the MSP would impact the execution of this project. This risk is being managed carefully by the EA to ensure a MSP partners are closely involved in the FSP, and that information sharing on related (cofinancing) activities is maintained in the meantime.
Iterative process for contracting country level activities for lead paint is difficult to administer	Medium	The global partners who will provide support to country processes according to the decision tree will only have clarity on the exact number of countries and scope of support required per country, after the regional meetings. A second/iterative contracting step will be required to allocate project

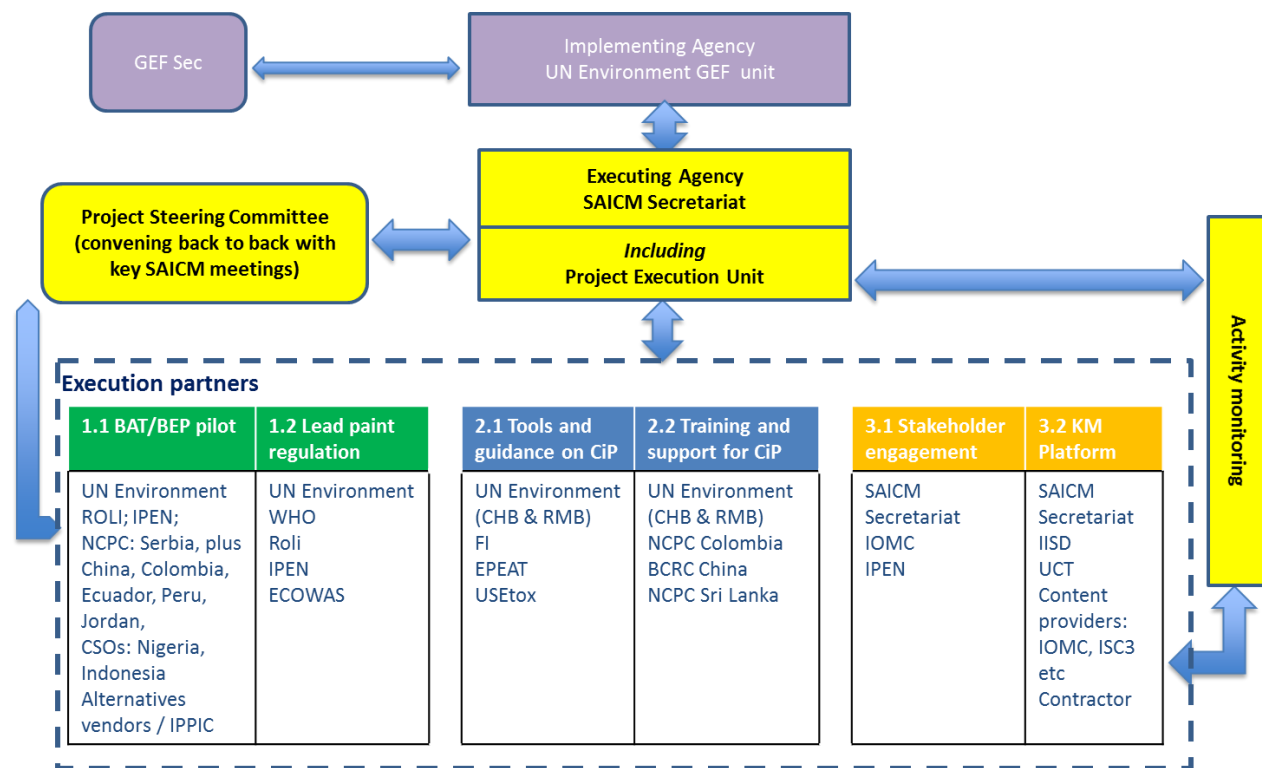
resources. This risk is managed by the EA administrative support provided by the PMC; and will be coordinated by the UN Environment CHB. The mitigation measure is to put in place an initial framework contract with each partner, and a simplified disbursement process for the second step.

A.6. Institutional Arrangement and Coordination.

Describe the institutional arrangement for project implementation.

Implementing Agency (IA): This project will be implemented by UN Environment. Please refer to Figure 4 below for the proposed project institutional structure. UN Environment will be responsible for the overall project supervision, overseeing the project progress through the monitoring and evaluation of project activities and progress reports. It will report the project implementing progress to GEF and will take part in the Project Steering Committee (PSC). UN Environment will provide guidance and oversight of project execution by the EA with review and approval of work plans, budget allocations and budget revisions proposed by the Executing Agency.

Figure 4: Proposed project implementation structure



Executing Agency (EA): The SAICM Secretariat will be the EA, and was identified as the only organization with the necessary structures in place for the close collaboration required with a diverse set of stakeholders. In addition the Secretariat is assessed as the organization best placed to provide the cross cutting programme management of the different components and provide sustainability of project results.

The SAICM Independent Evaluation found that “integration across sectors is a key pathway to achieving the 2020 goal”. The success of SAICM in building trust and collaborative relationships between stakeholders is evidenced by the degree of open and transparent sharing of information that already exists between them. Building on this trust and collaboration through the efforts of this project will further strengthen the open and transparent sharing of information pathway.

The SAICM Secretariat is uniquely positioned to work across sectors in a multi-stakeholder manner with active networks and stakeholder communities in place. The collaborative nature of this project supports progress towards the 2020 goal and will be further enhanced with greater efforts of sectors and stakeholders beyond 2020 in line with the 2030 Agenda for Sustainable Development.

The EA’s key roles include:

- Establishing, housing and supervising the project execution unit (PEU)
- Acting as Secretariat for the Project Steering Committee (PSC)
- Overseeing that the project runs according to the agreed work plan, budget and reporting tasks
- Communicating with, and disseminating information to SAICM stakeholders
- Coordinating project activities with those of the SAICM MSP, for which SAICM is also EA.

The EA will be contracted through an Internal Cooperation Agreement.

Project Execution Unit (PEU): The PEU will be staffed by a Knowledge Management Officer, a Stakeholder Outreach consultant (shared jointly with SAICM MSP) and an administration and finance officer (shared jointly with SAICM MSP). The role of the PEU is to:

- Ensure Project execution (all technical aspects of project implementation)
- Ensure project governance and oversight of the financial resources from GEF investment
- Provide staff time and expertise in guiding and advancing the project
- Sharing all achievements and project products/outputs with SAICM stakeholders
- Monitoring the execution of project components by the executing partners, UN Environment CHB (Component 1) and UN Environment RMB and CHB (Component 2). SAICM Secretariat will execute Component 3 directly.
- Organize the PSC meetings and serve as its Secretariat
- Management and implement the project results and output level M&E framework, to evaluate project performance
- Manage the flow of information from the field, producing periodic monitoring reports.

Outputs and activities will be driven by a SAICM Knowledge Management Officer who will be hired within three months of receipt of the project funds. This Officer will be based within the SAICM Secretariat and lead Knowledge Management activities under Output 3.1 and 3.2. They will also provide direct support for project management, pulling together the progress and information across all three project components to meet EA reporting obligations.

A number of UN Environment staff will contribute staff time and expertise in guiding and advancing the outputs of the project through UN Environment’s in-kind support. Furthermore, key project execution partners UN Environment CHB and RMB will be contracted via internal cooperation agreements directly by the SAICM Secretariat, with a clearly defined set of activities and resources which have been agreed during the PPG (please refer to the Annex G). Co-finance from these partners covers the staff time and costs for coordination of the project activities

with the ongoing programmes of work. The component coordinators will manage delivery and reporting by other project execution partners, including convening regular partner meetings (either in person or remotely). For Component 1, this process will be led by UN Environment CHB, with WHO, ABA-ROLI, IPEN, USEPA, NCPC Serbia, plus a country representative from the Global Alliance; for Component 2 this will be coordinated jointly by CHB and RMB co-leads, with USEtox, the NCPCs (Sri Lanka and Colombia), BCRC China, Green Building Council, and the Green Electronics Council. For Component 3, this process will be led by the SAICM Secretariat, with the chair of the IOMC, IISD, a representative from the Green Growth Knowledge Platform, WHO and a SAICM Regional Focal Point. These meetings/ calls will serve to:

- Update on the development of the component
- Substantive discussions covering thematic topics of interest to partners related to the outputs of the component
- Make recommendations for the Project Steering Committee (such as annual workplans and budgets and changes in project delivery as required).

The Executing Agency for this project will consult regularly with the IOMC through the six-monthly meetings and seek input into technical outputs of the project as appropriate. The IOMC plays an important role in the multistakeholder coordination and engagement function of the SAICM Secretariat and is an important channel to ensure the project results and activities are widely disseminated to countries, other stakeholders and networks.

PSC: The PSC’s membership includes IA, EA, UN Environment CHB and RMB, WHO, the Chair of the IOMC, NCPC Serbia, and relevant national government representatives, to be nominated by the SAICM ICCM5 Bureau. The role of the PSC is to:

- Oversee the GEF Project
- Provide overall guidance and ensure coordination between all parties
- Provide overall supervision for project implementation
- Approve the annual work plan and budget
- Oversee the implementation of corrective actions
- Enhance synergy between the GEF project and other ongoing initiatives related to chemicals and waste

Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

The project is innovative under GEF portfolio which has supported very limited other projects for SAICM and the EPIs. The work in Sri Lanka, Colombia and China will draw from the Stockholm Convention National Implementation Plans where they are available, and liaise closely with relevant project structures in those countries (e.g. Enabling Activities to update the National Implementation Plan for the Stockholm Convention on POPs, e.g. in Colombia).

Additional Information not well elaborated at PIF Stage:

Table 4 below summarizes the changes in the wording of outcomes and outputs since Project Identification Form (PIF) stage. Changes are marked in bold and further detail provided in the following paragraphs.

Table 4: Logical framework changes between PIF and CEO Endorsement Request

Outcomes / outputs at PIF	Revised outcomes /outputs	Justification/ explanation
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<u>stage</u>		
<u>Component 1: Promoting regulatory and voluntary action by government to phase out known toxic chemicals</u>	<u>Component 1: Promoting regulatory and voluntary action by government and industry to phase out lead in paint</u>	<u>The revised component title is explicit about referring to lead paint, as advised by STAP; and also reflects the role of the private sector in changing production practices.</u>
<u>Outcome 1: Countries restrict the use of lead in paint (LiP, 40 countries)</u>	<u>Outcome 1: Countries legislate and implement legislation to restrict the use of lead in paint (LiP, 40 countries)</u>	<u>The revised outcome is more explicit about the mechanisms to restrict lead in paint, covering both government action to pass legislation and industry action to implement the requirements by phasing out lead.</u>
<u>Output 1.1 Demonstration pilots with paint manufacturers in Small and Medium Enterprises</u>	<u>Output 1.1: Demonstration pilots with paint manufacturers in Small and Medium Enterprises executed in eight countries</u>	
<u>Output 1.2 Global Technical guidelines on BAT/BEP for manufacturers</u>	<u>Removed</u>	<u>This original output described an activity which has been integrated into the output on demonstration pilot projects.</u>
<u>Output 1.3 Global guidance developed Policy advocacy and public awareness campaigns to generate support for lead phase-out</u>	<u>Output 1.2 Policy support and awareness raising to generate support for local phase-out.</u>	<u>Original activity-level description has been removed from the output.</u>
<u>Outcome 2: Companies in the building products, toys, and electronics sectors track and manage Chemicals of Concern (CoC) in their products</u>	<u>Outcome 2: Governments and value chain actors in the building products, toys, and electronics sectors track and manage chemicals of concern (CoC) in their products</u>	<u>The revised outcome refers to the roles of government and others in the value chain, including customers, financiers, and certification bodies, as well as only companies producing the products.</u>
<u>Output 2.1 Platform to identify and quantify CoCs present in supply chains, based on existing and expanded Chemicals in Products (CiP) initiatives</u>	<u>Output 2.1 New tools and guidance to reduce the use of CoCs in the building, electronics and toys sectors</u>	<u>The original two outputs were merged into a single output, and a new output added (see row below).</u> <u>The original output 2.1 reflects an activity to develop a platform, which is covered in the revised project design as content production by all partners; and platform development integrated into Component 3 on KM.</u>
<u>Output 2.2 Green Economy tools and guidance refer to CiP data to improve product design, purchasing, and use practices</u>		<u>The reference to ‘Green Economy’ tools has been removed as it didn’t adequately cover the full range of available tools.</u>
	<u>Output 2.2 Training and support</u>	<u>This output was added to ensure that the</u>

	<u>for government and value chain actors to trial and adopt new guidance and tools</u>	<u>new tools will be tried, to provide feedback and improvement of the tools as well as to ensure some impact and change at country and value chain levels.</u>
<u>Component 3. Knowledge management and strategic planning</u>	<u>Component 3. Knowledge management and stakeholder engagement</u>	<u>The component title has been updated to reflect the removal of the original output 3.2 (see rows below)</u>
<u>Outcome 3: Cross-cutting SAICM implementation support to mainstream chemical management with science, policy and practice agendas of diverse sectors to 2020 and beyond</u>	<u>Outcome 3: A broad group of SAICM stakeholders access information and participate in communities of practice for peer-to-peer learning exchanges</u>	<u>The revised outcome is more streamlined and describes the change that will occur as a result of the project knowledge management and outreach activities.</u>
<u>Output 3.1 Knowledge management platform and new mechanisms to communicate science and best practices in policy development</u>	<u>Output 3.2 Knowledge Management platform provides a repository of information and forum for exchange of scientific and policy information</u>	<u>The order of the original outputs is reversed to highlight the priority of first engaging stakeholders who will be the audience for the KM platform.</u> <u>The revised output describes the ‘new mechanisms’ as requested by STAP, namely a document repository but also interactive forums to encourage active participation.</u>
<u>3.2 A list of measurable indicators to monitor project progress on Emerging Policy Issues beyond 2020 in line with the Sustainable Development Goals</u>	<u>Removed.</u>	<u>The process for monitoring progress in implementation of the EPIs is being reviewed by ICCM and the Beyond 2020 process.</u> <u>See detail in paragraph below.</u>
<u>Output 3.3 Multi-stakeholder engagement from other sectors and agendas</u>	<u>Output 3.1 Collaboration and engagement with the SDG and scientific communities to promote EPIs.</u>	<u>The revised output provides more targeted</u>

Component 1: Component 1, Output 1.1 focuses on executing pilot projects with NCPs in eight countries. Extensive consultation with project partners, and review of lessons from previous projects, underscored the need to work through established national entities to effectively execute and manage activities with private sector partners. The NCPs’ work will be coordinated by the Serbian NCP whose personnel have extensive and specific experience in paint reformulation. Output 1.2 involves technical assistance from UN Environment, WHO, IPEN, and adds the legal expertise of ABA-ROLI. Assistance needs have been defined according to where each country falls in the process of developing legislation on lead paint. In addition, the final design draws on the comparative advantage of WHO having national offices in each project country. These offices will have a key role in convening stakeholder meetings, and

reporting back to the regional execution nodes, particularly in countries where the MoH is leading the process for development of new legislation. .

Component 2: The structure of the component in the PIF was based on two outputs on a platform for reporting; and improving product design to reduce CoC respectively. At the CiP PPG workshop the stakeholders recommended the need for sector-specific approaches, given the diverse contexts for different product value chains, and proposed sector-specific indicators to facilitate communication and engagement in those sectors. The component activities are therefore organized with distinct activities and indicators for building products, electronics and toys respectively. The approach of promoting transparency on CoC and using this to stimulate phase-out of CoC remains unchanged from the original concept. The reference to Green Economy has been removed because it would potentially exclude other valid approaches, including ‘Sustainable Consumption and Production’ tools such as the public procurement, certification, and financing tools that have been identified (see Table xx); as well as chemical management tools such as LCA.

Component 3: The PIF included an additional output on ‘strategic planning’ and specifically on developing indicators for the EPIs which has been removed from the current proposal. The development of indicators for SAICM is being addressed via the intersessional process for Beyond 2020. Measuring progress on the EPIs goes beyond the scope of a timebound project and should be an integral part of the wider Beyond 2020 monitoring of progress. The output was therefore modified into an activity under the new Output 3.1 which will provide resources to develop a paper that reviews progress on the EPIs based on the FSP and MSP project results. It is anticipated that this will follow a structure of indicators to be proposed by the Beyond 2020 process, if such an indicator proposal is available in a timely manner, that will test any proposed structure with the specific EPIs proposed by the Beyond 2020 process.

A.7 Benefits. Describe the socioeconomic benefits to be delivered by the project at the national and local levels. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

Under Component 1, the project intends to improve health and environment through the reduction and elimination of lead paint in 40 countries. The project will provide support to 70 countries in total, and it is anticipated that 40 will achieve regulatory controls in the life of the project. Activities include awareness raising events for stakeholders on the harmful impacts of harmful lead, which will be increased in all 70 project countries. The project will also work with the paint industry on pilot BAT/BEP activities in seven countries, to help SMEs transition to lead free alternatives.

Under Component 2, activities in the toys, electronics, and building sector are expected to lead to reduction in the use in hazardous chemicals, decreasing exposure of those involved in manufacturing these products, as well as the individuals buying and using them, and those who are involved in waste management, particularly for e-waste.

Component 3, on Knowledge Management and stakeholder engagement will serve to magnify the global environmental benefits and health benefits of the activities in Components 1 and 2, through sharing them, and lessons learned with SAICM stakeholders internationally, ensuring opportunities for replication and scale-up. Component 3 will build linkages to the 2030 Agenda for Sustainable Development and to this effect will contribute to the political will of national governments in considering SAICM and the sound management of chemicals and waste beyond 2020.

A.8 Knowledge Management. Elaborate on the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives (e.g. participate in trainings, conferences, stakeholder exchanges, virtual networks, project twinning) and plans for the project to assess and document in a user-friendly form (e.g. lessons learned briefs, engaging websites, guidebooks based on experience) and share these experiences and expertise (e.g. participate in community of practices, organize seminars, trainings and conferences) with relevant stakeholders.

Knowledge management forms a key Component within this global project. The project will develop an integrated Knowledge Management Platform, to bring together information, and stakeholder communities on SAICM, with links to the SDG targets. The Knowledge Management Platform will also provide a space for project documents, outputs, and lessons learned to be featured in a user-friendly format. Maps and visual tools will be constructed and tested, using partner databases.

There will be a focus on the EPIs. The project will establish four moderated communities of practice, directly to corresponding to the EPIs being addressed in this project (Lead Paint, and CiP) and in the related MSP (HHPs, and EDCs/EPPPs). These communities will provide stakeholders from pilot countries, as well as scientists and practitioners from around the globe, a space to share ideas, data and knowledge, with and from other similar projects and initiatives, and ensure opportunities for networking building and communication through the use of technology and social media.

In addition, provision has been made for presentations at EPI relevant scientific conferences, to bring the scientific community, SAICM stakeholders and the SDG community closer together, and for members of the scientific community to present at key SAICM events – OEWG3 and ICCM5.

With respect to enhancing collaboration with the SDG community, the knowledge management component will establish linkages with existing knowledge networks/ platforms addressing chemicals management, SDGs and the 2030 Sustainable Development Agenda. The project will produce strategic outreach papers and materials including policy papers on SGDs and thematic papers, including a gender review.

B.1 Consistency with National Priorities. Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.:

Resolutions from the SAICM community as adopted at ICCM4 have been the driver for the project design. In addition to the technical resolutions as described in the Baseline section, the Conference also endorsed Overall Orientation and Guidance (OOG) for achieving the 2020 goal of sound management of chemicals (SAICM/ICCM.4/6). The project contributes to all six core activity areas of the Overall Orientation and Guidance.

From 2008 to 2012, the Quick Start Programme supported National Profiles and SAICM Implementation Plans in over 50 countries (http://cwm.unitar.org/national-profiles/nphomepage/np3_region.aspx). A process of stakeholder consultation and engagement led to these national strategic documents and action plans, and they contain the nationally identified priorities for chemicals management. The PPG phase involved extensive consultations with countries and other stakeholders.

For Component 1, this involved a review of national activities pertaining to lead paint, and classifying them according to a framework of evolution for lead paint regulation (Table 2, above). Countries on the right side of this framework have signalled the strongest commitment to instituting lead paint regulation. Countries on the left side of the framework have signalled their interest, but have made less progress. Project resources will be directed accordingly. At a regional level, the ECOWAS Secretariat was mandated by Ministers of the Environment of its member states to develop lead paint regulations in a regionally coordinated manner, at the 2017 AMCEN meeting.

For Component 2, the PPG phase organized a consultation workshop with representatives from the toys, electronics and building sectors, by reaching out via the CiP programme steering group and the RECP Net network. A survey to NCPCs resulted in the identification of Sri Lanka and Colombia as being committed to acting on these issues, including existence of a draft SPP national policy for electronics in Colombia and elements of the Sri Lanka Green Building Code.

For Component 3, maps and visual tools constructed will be built from data that is consistent with the SAICM emerging policy issues and the 11 basic elements identified by SAICM stakeholders in the Overall Orientation and Guidance in addition to data generated by the project.

C. Describe the budgeted M&E plan:

Project M&E will be conducted in accordance with established UNEP and GEF procedures and will be provided by the SAICM Secretariat. The M&E plan includes inception report, annual review and final evaluations. It also includes provision for ongoing monitoring of the execution of project components by a Stakeholder Outreach consultant, based in the Project Execution Unit at SAICM Secretariat. The Monitoring consultant will also be responsible for stakeholder engagement, gender monitoring, and outreach to the broader SAICM community.

The project's M&E Plan will be presented and finalized in the Project's Inception Report following a collective fine-tuning of indicators, means of verification, etc.

Table 4: Monitoring and Evaluation Plan


M&E activity	Purpose	Responsible	Budget (US\$)	Time-frame
Inception workshop	Review of project activities, outputs and intended outcomes; detailed work planning	EA	Included in staff costs	Within two months of project start.
Inception report	Provides annual progress review and detailed annual implementation and budget planning	EA	Included in staff costs	Immediately following Inception Workshop
Project Steering Committee	The PSC will be held annually, in line with SAICM stakeholder meetings wherever possible (e.g. the Open Ended Working Group or ICCM). Provides annual progress review and detailed annual implementation and budget planning, including revisions to key documents such as procurement plans and Risk Table.	EA	200,000 for 3-4 meetings	At least annually Additional component-specific coordination/ advisory meetings will also be held to support preparation of recommendations to PSC.
Ongoing	This activity will be ongoing to allow continuous	Stakeholder	15,000	Ongoing

monitoring and gender mainstreaming	monitoring of the execution. The Monitoring consultant will also ensure links are made between SAICM Focal Points, health ministries and environment ministries.	Outreach consultant		
Travel for project monitoring	This will include travel of the Monitoring consultant to Component meetings convened regionally or nationally under Components 1 and 2.	Stakeholder Outreach consultant	15,000	1-2 missions per year, depending on needs e.g. to unlock bottlenecks or support partners
Midterm Review	Reviews progress and draws lessons on implementation issues and impact of project activities to date. Proposes corrective actions as required.	Consultant	40,000	At the midterm of the project
Terminal report	Reviews effectiveness against implementation plan Highlights technical outputs Identifies lessons learned and likely design approaches for future projects, assesses likelihood of achieving design outcomes	EA	Included in staff costs	At the end of project implementation
Independent Terminal evaluation	Reviews effectiveness, efficiency and timeliness of project implementation, coordination mechanisms and outputs Identifies lessons learned and likely remedial actions for future projects Highlights technical achievements and assesses against prevailing benchmarks	UNEP Evaluation Office	80,000 ⁹⁶	At end of project implementation
Independent Financial Audit	Reviews use of project funds against budget and assesses probity of expenditure and transactions	EA	Included in the UN Environment audit	At the end of project implementation
Total indicative Monitoring & Evaluation cost			\$350,000	

⁹⁶ This terminal evaluation will be conducted jointly with the SAICM MSP project, which will provide an additional contribution of USD 20,000 to the total evaluation costs.

A. GEF Agency(ies) certification

This request has been prepared in accordance with GEF policies⁹⁷ and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Kelly West, Senior Programme Manager & Global Environment Facility Coordinator Corporate Services Division UN Environment		May 30, 2018	Eloise Touni Task Manager	(41) 2291 78607	Eloise.Touni@un.org

⁹⁷ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT

ANNEX A: PROJECT RESULTS FRAMEWORK and THEORY OF CHANGE

(either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Project Objective	Objective level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	UNEP MTS reference
Accelerate adoption of national and value chain initiatives to control Emerging Policy Issues (EPIs), and contribute to the 2020 SAICM goal and 2030 Agenda for Sustainable Development	1. No. of countries and companies that have adopted regulatory and value chain initiatives to control EPIs, and to meet 2030 Agenda targets.	68 countries have regulated lead paint. Currently, there is no comparative assessments of direct toxicity of products containing POPs and other CoCs, including toys, building products and electronics.	Composite indicator (Outcomes 1, 2 and 3) = 40 governments pass lead laws + 50 paint producers + 2 governments with SPP + 26 companies using USETOX/ phasing out CoC. By 2020, at least 2 manufacturers in LMIC demonstrate reduced toxicity of products.	CoP reports on EPI USEtox model	Political will exists for taking recommended measures Alternatives to CoC exist in LMIC markets	NA
Component 1: Promoting regulatory and voluntary action by government and industry to phase out lead in paint						
Outcome 1	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	UNEP MTS Expected Result
Countries legislate and implement legislation to restrict the use of lead in paint (LiP, 40 countries)	2. No. of countries with adopted legislation on legal limits to LiP	As of February 2018, 68 countries have regulated lead paint. The PPG involved extensive research, consultation and classification of countries into a framework for action. The project has identified 70 countries where there is evidence the country is ready to regulate lead paint.	80 countries by Year 2 (existing champion countries) 110 countries by 2020	Gazetting (or equivalent) or legislation	Governments are proactive. Project has adequate resources to provide legal drafting assistance to 50 countries.	Chemicals, Waste and Air Quality Expected Accomplishment 5 (a) ³⁹⁸
	3. No. of paint manufacturers switching to lead free production	While some global brands have phased out lead, SMEs in project countries still continue to produce paint	50 manufacturers by 2020 in 8 countries	Independent testing of paints	Lead free methods are either cost neutral or	

⁹⁸ Technical guidance and support services for the establishment and enforcement of laws, regulations and fiscal policies for sound chemicals management

		with lead as demonstrated by lead paint testing (see output level baseline below)			imposed by regulation	
	4. No. of registered awareness raising events	Countries hosting International Lead Poisoning Prevention Week events: 40 2013; to 41 countries in 2017	Partners convene 50 events for International Lead Poisoning Prevention Week and as needed	Lead Paint Alliance website	The few activities directly funded by the project will trigger partners to scale these events up	
Outcome 1 Outputs	Baseline		Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	UNEP PoW Output Reference Number
Output 1.1 Demonstration pilots with paint manufacturers in Small and Medium Sized enterprises executed in eight countries	Pilot countries (Ecuador, Colombia, Peru, China, Indonesia, Jordan, and Nigeria) have significant paint industries. In all of these countries lead concentrations in paint is currently unregulated, or under-regulated, and lead pigments and driers are used by SMEs in paint formulation. Ecuador paint testing found 70% of paints samples had lead concentrations > 90 ppm. Colombian paint testing found that 64% of paints samples had lead concentrations > 600 ppm, with 59% of paints with lead concentrations >10,000 ppm. Paint testing results in Peru indicated 90% of paints had lead concentrations >90 ppm, and 40% of paints had concentrations >10,000 ppm. In China , paint testing found 34% of paints contained lead concentrations > 10,000 ppm. China currently has a non-protective standard of 90ppm – 1000ppm for soluble lead, depending on paint use. Indonesian paint testing found 78% of paints sampled had concentrations greater than 600 ppm, and 41% of paints had a lead concentrations greater than 10,000ppm. In Jordan , there is a nonprotective legislation of 600ppm and the	Mid-term 8 demonstration pilots finalize national paint sector reviews 4 governments receiving legal drafting support from ABA-ROLI End of project: Pilot demonstrations completed in 8 countries 8 governments receive legal drafting support from ABA-ROLI and draft legislation 30 SMEs executed demonstration pilots	NCPC/IPEN reports NCPC/IPEN / ABA-ROLI reports NCPC/IPEN / ABA-ROLI reports Report	SMEs are able to phase out use of lead in paint	Subprogramme 5 Chemicals, waste and air quality: Expected accomplishment a, indicator (ii) ⁹⁹	

⁹⁹ Increase in the number of private companies/industries that have developed or implemented a strategy or specific actions on sound chemicals management using UNEP analysis or guidance

	government plans to introduce a more stringent limit. 18% of paints tested had lead concentrations >90ppm. A Nigerian paint study found 74% of paints sampled to have lead concentrations > 90 ppm, with 54% have concentrations >10,000 ppm.				
Output 1.2 Policy support and awareness raising generate support for lead phase out.	The Lead Paint Alliance provides ad-hoc support to countries and tracks the number of countries regulating lead in paint. A Model Law has been developed but not systematically rolled out with countries. The number of countries hosting International Lead Poisoning Prevention Week events has remained stable over time (40 countries in 2013; to 41 countries in 2017), indicating the growing awareness needed to take action on this issue, is not occurring, and that more work is needed.	Mid term 20 countries receiving drafting assistance. Events convened in 15 countries for International Lead Poisoning Prevention Week End of project 50 countries received legal assistance 20 countries convening events for International Lead Poisoning Prevention Week	Regional workshop reports (containing national project plan) ABA ROLI mission reports (on national drafting workshops) Lead Paint Alliance website Project reports	Governments receptive to working with the project to expedite lead paint regulation. Pressure from industry does not prevent governments regulating lead paint.	Subprogramme 5 Chemicals, waste and air quality: Expected accomplishment a, indicator (i) ¹⁰⁰

Component 2: Lifecycle management of chemicals present in products

Outcome 2	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	UNEP MTS Expected Result
Governments and value chain actors in the building products, toys, and electronics sectors track and manage chemicals of concern (CoC) in their products	5. Number of governments and value chain actors tracking and managing CoC in products	Global brands and companies selling in developed countries should meet regulatory and voluntary chemical management requirements (e.g. product recalls for toys).	2 governments set SPP and green building code requirements for CoC (<i>Sri Lanka & Colombia</i>) 6 companies meet SPP CoC requirements (<i>Sri Lanka, Colombia</i>) 20 companies use USEtox tools to evaluate toxicity (<i>Sri Lanka, China</i>) 10 companies report toy audit	Green Building Code / tender documents	Governments are committed to implementing their published SPP policies	Subprogramme 6 on Resource Efficiency, EA b, Output 1, indicator (i)

¹⁰⁰ Increase in the number of countries that have used UNEP analysis or guidance, and where possible are applying a multi-sectoral approach, in developing or implementing legislation, policies or action plans that promote sound chemicals management and implementation of the relevant multilateral environmental agreements and SAICM

		Sustainable Public Procurement (SPP) policies exist in many countries but do not explicitly address CoC	results on UNEP / CiP portal (<i>China</i>)	USEtox reports		
	6. Number of trained value chain and government actors providing feedback on use of new tools and guidance (min 30% female)	Tools that reflect CoC are only the Colombian electronics draft SPP policy. This has not been rolled out yet or piloted for CoC.	End of project At least 30% of 305 individuals trained provide feedback on how they have applied the training on the new tools (100 people, 30 women)	Emails and reports received from partners	Training participants are selected based on their ability to implement changes as a result of the training	Subprogramme 6 on Resource Efficiency, EA b, Output 1, indicator (i)
Outcome 2 Outputs	Baseline		Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	UNEP PoW Output Reference Number
Output 2.1 New tools and guidance to reduce the use of CoCs in the building, electronics and toys sectors	<p>Life cycle assessment tools include hazardous chemicals but few alternatives. Near field (=direct) exposure pathways limited in USEtox; and multi-layer materials are not modelled.</p> <p>Sri Lanka Green Building Code covers VOC and green labelled building materials including GREEN Product Labelling System which considers chromium 6 and lead in paints.</p> <p>Brazil: voluntary standard (PBQP-H) used in public procurement includes lead free paint, lead and cadmium free coatings and porcelain, flame retardants for walls and roof</p> <p>Green finance for buildings exists but does not address chemicals.</p>	<p>Mid-term Report on CoC and alternatives in building sector (global) Cost benefit analysis for electronics SPP practices (Colombia) 2 regional electronics studies (LAC and CEE) Report on chemical concentrations in toys and regulatory compliance in China</p> <p>End of project <i>Building sector: 3 guidance/ tools:</i> USEtox assessment of building product impacts on human health, ecotox and other metrics</p>	<p>Reports</p> <p>USEtox</p> <p>Publications</p>	<p>Alternatives to CoC exist and are accessible to producers in LMIC markets; the USEtox model is suited to their needs.</p> <p>International building council and global initiatives have capacity to address all their stated priorities including healthy buildings.</p> <p>Limited government commitment to implementing agreed</p>	<p>From LC Initiative: 621101 Subprogramme 6 on Resource Efficiency, EA b, Output 1, indicator (i)¹⁰²</p> <p>Subprogramme 6 on Resource Efficiency, EA b, Output 1 (ii)¹⁰³</p> <p>Subprogramme 5, EA (a), indicator (ii)</p>	

¹⁰¹ Database services providing enhanced availability and accessibility of life cycle assessment data through an interoperable global network, methods for establishing environmental and social indicators and the ways to apply them in decision-making, practical tools for the application of life cycle information in decision-making, and capacity development

¹⁰² Increase in the number of public and private stakeholders that base their decision-making on life cycle approaches

¹⁰³ Increase in the number of public and private finance stakeholders that adopt sustainable finance principles, processes and frameworks

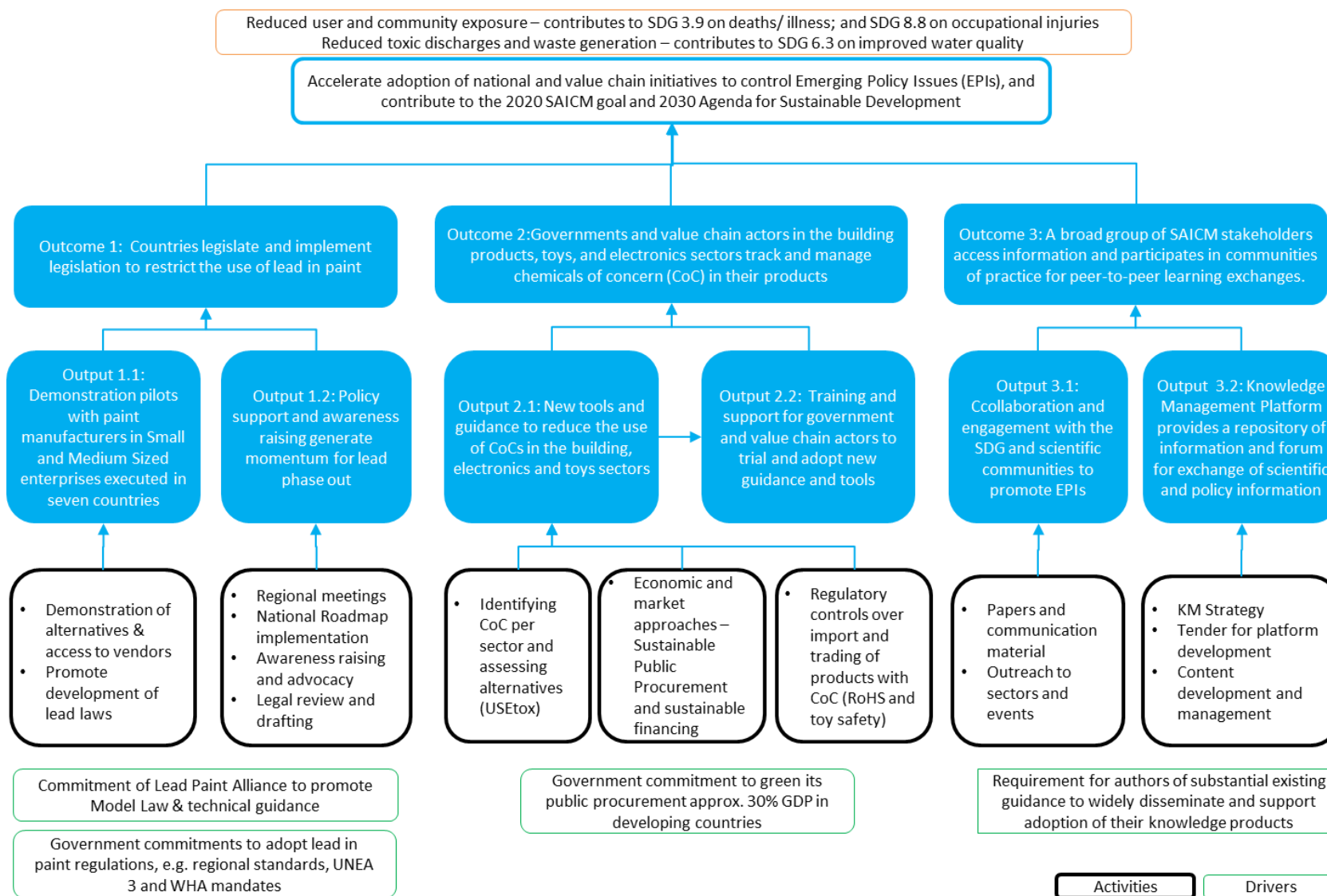
information and participate in communities of practice for peer-to-peer learning exchanges.	knowledge resources shared with policy makers on EPIs and SDGs	shared as INF documents to ICCM but original research is not widely available to policy makers. Stockholm Convention POPRC and Rotterdam Convention CRC cover certain chemicals but not all EPIs	scientific organizations on the 12 project papers accessed by policy makers via SAICM website or meetings End of project At least 20 science media sources publishing SAICM related content	website Submissions to SAICM Sec	possible via open access journals.	and air quality: Expected accomplishment a, - 6
	2. No. of active members of KM communities of practice and users accessing information	The current SAICM website is static, new content and information updates are limited. There is no forum for interaction and communication between stakeholders. Currently resources for maintenance and performance are lacking.	Mid-term 4 Communities of Practice (CoPs) established End of project >100 active members in each CoP with gender balance (min 30% women)	CoPs on KM Platform Registered members	SAICM stakeholders have an appetite for exchanging information on EPIs	Subprogramme 5 Chemicals, waste and air quality: Expected accomplishment a, - 6
Outputs	Baseline	Targets and Milestones	Monitoring	Means of Verification	Assumptions & Risks	UNEP PoW Output Reference Number
Output 3.1 Collaboration and engagement with the SDG and scientific communities to promote EPIs	Despite there being strong conceptual links between EPIs and the targets included in the 2030 Agenda for Sustainable Development, there is currently no coordination between the two areas of work. EPI work is currently being driven by the proponents of the EPI within the SAICM process and the IOMC lead agencies, with limited engagement of a broader stakeholder community. ICCM resolution IV/4 indicates that the Beyond 2020 process should be linked to the 2030 Agenda. SAICM's 20 indicators of reporting progress ¹⁰⁴ are being revised by the Beyond 2020 Intersessional	Mid-term Target = 12 papers (5 policy briefs on SDGs 2, 3, 6, 11, 12; 5 thematic papers on water, cities, science etc; 1 gender review mapping EPIs and identifying gender priorities; 1 indicators mapping paper reviewing contribution of EPIs to indicators of progress/ impact) End of project 5 presentations on SAICM at scientific community events 10 presentations at related policy		Policy briefs Thematic papers Gender review report Mission reports Side event	Assume the science and academic community are willing to engage with SAICM and forging links between the EPIs and the relevant SDG targets.	Subprogramme 5 Chemicals, waste and air quality: Expected accomplishment a, - 6 ¹⁰⁵

¹⁰⁴ <http://www.saicm.org/Portals/12/Documents/SAICM-List%20of%20indicators%20for%20reporting%20progress.pdf>

	Process. Revised indicators are expected to be more results-focused and relevant for diverse stakeholders to be able to align to. They will also link to the SDG targets.	events (biodiversity, cities, food systems etc) 2 project side events at OEWG and ICCM5 12 communications/ content pieces on HHPs, EDC/EPPPs, Lead paint, and CiP	reports EPI content on KM Platform		
Output 3.2 Knowledge Management Platform provides a repository of information and forum for exchange of scientific and policy information	<p>Large number of knowledge products by IOMC and projects on EPI topics PPG, stakeholder needs assessment which identified : access to ongoing scientific research; tracking regulatory status on chemicals and SAICM country implementation; results best practices and lessons learned.</p> <p>These gaps are the basis of a draft Knowledge Management Strategy initiated during the PPG. The Secretariat has also drafted a Request for Proposal for the design and build of the Knowledge Management platform. Extensive consultations have been held with potential technology providers, including MapX, SCP Platform and GGKP to define the role of geospatial data on the Knowledge Management Platform.</p>	<p>Mid-term 1 SAICM Knowledge Management Strategy</p> <p>1 contract in place with web architecture service provider(s) for an integrated platform including spatial and non-spatial data</p> <p>5 maps and visual tool prototypes constructed and tested; stakeholders consulted at OEWG3 Technical content on EPIs produced and submitted by project components (on HHP, EDC/EPPP, lead paint and CiP).</p> <p>End of project 50 knowledge exchange instruments featured on the Platform including 5 maps and visual tools; information on 4 EPIs; CoPs established for each EPI (4 total)</p>	<p>Report</p> <p>Signed agreement and workplan</p> <p>Maps</p> <p>Consultation report</p> <p>Component reports</p>	<p>Assumption that the organizations and projects that have developed a very comprehensive baseline of knowledge products and experiences, will be willing and committed to sharing these through a SAICM KM platform</p>	<p>Subprogramme 5 Chemicals, waste and air quality: Expected accomplishment a, - 6</p>

¹⁰⁵ Advisory, policy and coordination support services to secretariat of chemicals-related multilateral environmental agreements and the Strategic Approach to promote sound chemicals management

THEORY OF CHANGE



ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

The two tables below summarize the comments received from the STAP at PIF stage; and from the Council members at work program inclusion. The second column gives the project responses.

STAP Issues Raised	UN Environment Response
<p>1. Project Objective: the STAP advise that the current project objective should be made simpler and clearer. It is difficult to understand what is meant by "measure adoption of national activities to control Emerging Policy Issues". This suggest that the project will be measuring the adoption of national activities related to the EPIs identified under SAICM (which is not the case based on the project components, outcomes and outputs), rather than supporting countries to adopt the EPIs and take action to accelerate their implementation. We therefore suggest that the objective should be revised along these lines.</p>	<p>The objective has been revised: Accelerate adoption of national and value chain initiatives to control Emerging Policy Issues (EPIs), and measure their contribution to the 2020 SAICM goal and 2030 Agenda for Sustainable Development</p>
<p>2. Project components: the titles of project components 1, 2 and 3 in Table B should be aligned with the indicative project description summary in section 3: proposed alternative scenario. The titles in Table B are either broader in scope or different from what is provided in the detailed project description.</p>	<p>Comments gratefully acknowledged and inconsistencies have been removed.</p>
<p>3. Component 1 is to focus on promoting regulatory and voluntary action by government to phase out known toxic chemicals, suggesting that several chemicals will be targeted. However the activities deal only with Lead in Paints. STAP suggest that the component should be revised to reflect this.</p>	
<p>The idea of a demonstration pilot could be useful and should ideally help strengthen public-private partnerships. However, more information is needed on what this particular pilot demonstration is about. Would it be a "leadless" paint manufacturing process? Would it be identifying a new BAT/BEP? And if so, how would the effectiveness be measured? Or would it be based on an existing chemical production process already in use? If so, it would be useful to provide information on such a process in the project document in order to be able to certify its environmental friendliness and sustainability. Also, given that this is a global project, it will be important to ensure that the</p>	<p>The pilot activities are focused on SMEs in Jordan, Peru, Ecuador, Colombia, China, Indonesia and Nigeria focusing on providing technical support to SMEs producing lead paint. There is no need to identify new BAT/BEP. Alternatives exist and there is a need to connect both alternatives suppliers with SMEs, and for the provision of technical support to SMEs in the process of reformulation. A list of lead substitutes for driers and colourants is included in the baseline description and footnotes, especially the links to the IPEN and IAMC guidance on paints and varnishes.</p>

<p>demonstration project sites are selected in different places with differing circumstances, in order to ensure that the final output and advice is applicable to different national situations.</p>	<p>The PPG phase consulted extensively with experts, NCPCs, and the paint industry to glean a full understanding of the challenges facing small and medium-sized paint producers. Pilots will be executed nationally with international oversight and technical support provided by the NCPC Serbia, which has deep technical expertise in transitioning to lead free paint. This international technical support role will facilitate learning between countries in different regions.</p>
<p>Component 1 would also develop "global technical guidelines on BAT/BEP for manufacturers". We believe this could be a useful output to help countries act. But the STAP also believe that examples of guidance exist from countries like the United States (https://www.epa.gov/lead/lead-laws-and-regulations), the EU (http://ec.europa.eu/environment/air/pollutants/stationary/paints/paints_legis.htm), as well as Uruguay (http://www.unep.org/sites/all/themes/noleadpaint/docs/Module%20Hiii%20Uruguay%20Case%20Study%20FINAL.pdf), and the Philippines (https://www.epa.gov/sites/production/files/2015-11/documents/philippines_case_study_presentation.pdf). It is therefore important that the planned global guidance build on what already exists and takes into consideration the circumstances of developing countries in its design - to ensure usefulness and applicability. It is also important that the guideline include sections on implementation, enforcement, monitoring and reporting. More information on what the guidance would set to achieve and a roadmap would be useful.</p>	<p>The guidelines highlighted by STAP are largely concerned with the regulatory, legal and institutional aspects of restricting lead in paint. Some technical guidance also exists on BAT/BP for manufacturers (and these are reviewed in the baseline section). These existing guidelines have not been widely taken up, as information from consultations with SMEs indicate they require expertise as well as guidance to successfully reformulate paint. As such, the project has been reconceived to provide this technical support through both national NCPCs, and through NCPC Serbia. Technical guidelines will be under the project, but this has been reclassified as an activity, to be completed at the end of the project. Under this approach the guidance will include experiences from this project, and focus on providing information to allow further scale up and rollout of project activities.</p>
<p>- Component 1 also includes the development of an online toolkit with a guide for regulating lead in paint. The STAP however noted that a "Toolkit for Establishing Laws to Control the Use of Lead in Paint" is currently available on UNEP's website developed by the Global Alliance to Eliminate Lead in Paint (http://www.unep.org/chemicalsandwaste/noleadpaint/toolkit). It would be useful to provide information on what this new toolkit would do in addition to this. A better description of the toolkit is needed too, including its contents, how to ensure usability, and lessons learnt from the demonstration pilot.</p>	<p>During the PPG phase the UNEP online toolkit was a key communication tool to share updates and documents with project partners, and to share the Model Law developed by the Alliance. The toolkit will continue to be used by the project as the key communication channel at the Regional Workshop and during implementation of the national roadmaps. The further development of the toolkit is ongoing by project partners, and has been removed from the lead paint component. When the wider SAICM KM strategy and platform are finalized, they will explicitly connect to the existing toolkit.</p>

<p>4. Component 2 focuses on Chemicals in Products with specifically on toys, building products, and electronics. This is a less developed, we think it needs a conceptual map on what elements of the life cycle would be considered, and what type of green economy tools will be developed. Output 2.1 will establish a platform to identify and quantify chemicals in products present in supply chains. This is an important output, however a better description of the activities that will deliver this is needed. There is an indication of a coordinating "mechanism" to share existing information on companies and initiatives but we think more is needed, in order to ascertain its ability to deliver. There is also mention of a platform which needs to be explained. The same output also includes the "facilitation of the expansion of information collection on additional chemicals and new companies or stakeholders", but no information on how this will be done. Furthermore, getting companies to share information especially on a platform available to their competitors would be face many significant barriers, but there is no indication of how these would be overcome.</p>	<p>The PPG phase did a detailed review of the life cycle needs for toys, building products and electronics, including development of conceptual life cycle maps and intervention points (refer to the ISSPPRO report referenced in the baseline section). These, and stakeholder consultation including with the textiles sector, have been the drivers for prioritisation and selection of the proposed approaches as described in the Alternative Scenario. The involvement of private sector networks and value chain actors including the Green Electronics Council has guided the project design to ensure buy-in by their members and non-members.</p>
<p>- It is difficult to understand Output 2.2 on green economy tools and guidance. Is this going to be another toolkit or guidance containing green economy tools? What are the green economy tools to be promoted? Are green economy tools to be developed for each targeted product types " toys, building products, and electronics? How will expertise from UN Environment be shared, seminars, training, capacity building initiatives etc.? What effort will be made to ensure that companies adopt the promoted green economy tools? More information needs to be provided.</p>	<p>This component will be co-delivered by the Sustainable Consumption and Production Branch of UN Environment and will link strongly to their existing programme of work as outlined in the Baseline section.</p> <p>The PPG identified key green economy and sustainable consumption and production tools as presented in Table 3 in the baseline section. The proposed alternative scenario section provides detailed information on the exact tools that will be used (USEtox, SPP, green mortgages...) and the proposed approach to modify these to reflect chemical priorities and issues.</p>
<p>- For chemicals in electronic products, the project would be "focusing solely on upstream challenges, to efficiently reduce the amount of hazardous substances at source". However no information was provided on how this will be done. How would the project work with electronic manufacturers in developing countries to change their current practices? How would lessons from giant electronic manufacturers in developed countries be incorporated into the project? Companies like Apple are pushing efforts to reduce toxic chemicals in their products and are working to</p>	<p>The PPG phase has engaged both individual companies as well as indirectly via the Chemicals in Products programme and Green Electronics Council. The proposed regional electronics studies build on existing work done e.g. under the Global E-waste Monitor, and an ongoing study with a deep dive on Africa. These regional studies will identify and prioritize both regions and individual countries within regions, for further work at different stages of the value chain.</p>

<p>improve the sustainability of their supply chain (see their annual report: http://images.apple.com/environment/pdf/Apple_Environmental_Responsibility_Report_2016.pdf). How will the project engage and glean lessons learnt from this and other similar efforts?</p> <p>- Regional focus of the project. There are several references to regional activities without the region being specified, or the criteria for selection, and how these activities would feed into the overall global objective of the project. It will be important to target developing countries where electronics products are being produced in significant quantities.</p>	<p>During project implementation, these will be shared with manufacturers in developed and developing countries, and used to create a kind of benchmark for global companies to compare themselves against, possibly via a voluntary consensus standard that brings together the common elements of diverse existing initiatives.</p>
<p>5. Component 3: Output 3.1 includes "new mechanisms" to communicate science and best practices in management. A description of the mechanism needs to be provided, and an explanation of how this will be different from what currently exists.</p>	<p>The PPG phase reviewed existing knowledge management tools and these are summarized in the Baseline section. The user needs assessment also reviewed users among key SAICM target audiences (particularly national and regional focal points) and has informed the development of the KM strategy outline.</p>
<p>- It would be useful to provide some information on how the project will "support early planning for chemical management in the 2030 Agenda for Sustainable Development". What are the specific planned activities for achieving this?</p>	<p>As outlined in the section 'changes to project design since PIF', the output on indicators has been modified during the PPG, but the project will support links with the SDGs agenda through the KM and stakeholder engagement component, by preparing papers and policy briefs addressing particular SDGs and the relevant chemicals management issues; and by a paper demonstrating how the project and wider work on EPIs may contribute to reporting on any progress reporting framework proposed by the Beyond 2020 process.</p>

Responses to Council review at work program inclusion (comments received from US and detailed response submitted 19/5/2017 via GEF Sec, which is summarized and updated in the following table):

Council Issues Raised	UN Environment Response
<p>Better specification of which kinds of chemicals will be addressed by the project</p>	<p>Noted and addressed throughout the document, e.g. re-naming the Component 1 to be explicit about lead in paint (compared to the PIF component title referring to 'hazardous chemicals'); Table 1 for the priority chemical groups to be addressed under Component 2.</p>
<p>Whether waste from the CiP sectors will be addressed</p>	<p>The project strategy is to reduce the generation of hazardous wastes by intervening at earlier stages in the lifecycle of products that contain hazardous substances. Therefore, wastes contaminated with chemicals of concern will be</p>

	minimized, in line with the waste hierarchy, but waste management approaches are not explicitly included in this project design.
Clarification on how the project contributes to the GEF Program on POPs	The project will address new POPs that are present in products of the three sectors such as flame retardants. Please refer to Table 1 of the current document for details of POPs; and section 3 (proposed alternative scenario) for relevance to GEF Focal Area strategies and Strategic Objectives.
Involvement of industry stakeholders in the development of Component 2	Industry stakeholders were engaged via the CiP programme during the PPG, with representatives of toy, building product and electronics companies and industrial associations participating in the project design workshop. Please refer to the list of co-financing partners for additional details.

Annex C: status of implementation of project preparation activities and the use of funds¹⁰⁶

A. Provide detailed funding amount of the PPG activities financing status in the table below

PPG Grant Approved at PIF: USD 200,000			
<i>Project Preparation Activities Implemented</i>	<i>GETF/LDCF/SCCF/CBIT Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
Personnel – coordination Lead in Paint	10,000	12,427	
Personnel – SAICM contractor	30,600	41,153	
Personnel – project development and KM expert	24,900		20,600
Travel – coordination with RMB	8,000	12,784	
WHO review and baseline	8,000	8,000	
Gender, KM and EPI reviews	25,500	22,160	
Lead paint technical review and consultation meeting	40,000	40,000	
CiP sector reviews	30,000	30,000	
CiP consultation meeting	23,000	25,474	
Total	200,000	179,400	20,600

¹⁰⁶ If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.

Annex D: calendar of expected reflows

(if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/CBIT Trust Funds or to your Agency (and/or revolving fund that will be set up)

N/A

Annex E: consultants to be hired

Position Titles	\$/ Person Week*	Estimated Person Weeks**	Tasks To Be Performed
For Technical Assistance			
International			
Technical guideline and pilot consultant	2,500	40	Will provide ongoing technical backstopping to NCPCs conducting BAT/BEP pilot projects, and will be responsible for the drafting of project technical guidance.
Technical and Science Advisor (IPEN – to Indonesia and Nigeria BAT/BEP activities)	2,500	30	Technical support and advice to Indonesian and Nigerian NGOs completing BAT/BEP pilot projects.
Legal support network consultant	2,500	55.4	Responsible for coordination and overall legal support to countries, in association with three legal regional consultants. Responsible for legislative review, drafting, and advising countries.
WHO Technical consultant	2,500	42	Lead and coordinate the work of WHO regional support to countries in terms of following national project plans to enact legislation (in countries, where WHO is nominated the Lead Executing Partner)
ECOWAC Technical advisor	2,500	32	Support ECOWAS countries in coordinating their legislative efforts in line with AMCEN decision to adopt a regional standard for lead paint.
Justification for travel, if any: Little travel is anticipated for international consultants, with the exception for travel to regional project meetings.			
Regional /local			
SRADev BAT/BEP consultant	1,000	40	Responsible for leading the BAT/BEP pilot with the paint industry in Nigeria (according to the NCPC ToR). Will receive technical guidance from NCPC Serbia, and other support from the IPEN technical consultant.
BaliFokus BAT/BEP consultant	1,000	40	Responsible for leading the BAT/BEP pilot with the paint industry in Indonesia (according to the NCPC ToR). Will receive technical guidance from NCPC Serbia, and other support from the IPEN technical consultant.

Regional legal officer (region 1)	1,000	60	Will provide legal assistance to countries in the region according to their respective national project plans. Assistance may include: legal review; legal drafting; and national visits to stakeholder meetings.
Regional legal officer (region 2)	1,000	60	Will provide legal assistance to countries in the region according to their respective national project plans. Assistance may include: legal review; legal drafting; and national visits to stakeholder meetings.
Regional legal officer (region 3)	1,000	60	Will provide legal assistance to countries in the region according to their respective national project plans. Assistance may include: legal review; legal drafting; and national visits to stakeholder meetings.
Regional awareness raising consultant (region 1)	1,000	25	Provide support to countries in project, but in which governments have declined assistance with regulating. Awareness raising consultants will support national groups in raising awareness among communities on the dangers of lead paint.
Regional awareness raising consultant (region 2)	1,000	25	Provide support to countries in project, but in which governments have declined assistance with regulating. Awareness raising consultants will support national groups in raising awareness among communities on the dangers of lead paint.
WHO regional technical assistant (region 3)	1,000	60	Assist project countries to follow national project plans to enact legislation (in countries, where WHO is nominated the Lead Executing Partner)
WHO regional technical assistant (region 4)	1,000	60	Assist project countries to follow national project plans to enact legislation (in countries, where WHO is nominated the Lead Executing Partner)
Justification for travel, if any: Regional consultants will have some travel to project countries to provide technical assistance.			

Annex F: budget and workplan

(See Excel file)

Annex G: Implementation Arrangements

As outlined in Section A6 (Institutional Arrangements and coordination), component coordinators will manage delivery and reporting by other project execution partners for Components 1 and 2.

Component 1: Key executing partners are CHB and WHO. The CHB will provide Targeted Technical Assistance (TTA) to support the efficient execution of the outputs under the component. Specifically, the **CHB Component Coordinator** will involve the following duties:

- Provide technical oversight to contracted project partners (NCPCs, WHO, IPEN, ABA-ROLI) and clear their technical reports;
- Convene regular partner meetings with WHO, ABA-ROLI, IPEN, USEPA, NCPC Serbia, plus a country representative from the Global Alliance;
- Oversee the technical quality of the BAP/BEP technical guidelines for SMEs, awareness materials, draft legislation/ lead paint limits;
- Lead consultations with Ministries of Environments, assess needs and link with appropriate project partners;
- Organize regional capacity building trainings and workshops ensuring coherent approach of contracted project partners;
- Attend and contribute to national multi-stakeholders' workshops and meeting to foster support to awareness on toxic effects of lead and need for legislative measures and/or lead paint limit;
- Ensure integration and synergies between the GEF project and other relevant ongoing initiatives in the regions/sub-regions;
- Present project progress at the SAICM OEWG;
- Oversee and carry out technical backstopping to the project as deemed necessary.

Precise deliverables:

- Review of technical guidelines on the BAP/BEP of lead free paint manufacturing for SMEs
- Report on regional capacity building activities (trainings and workshops)
- Six-monthly Reports on country-level progress on awareness and legislation
- Six-monthly reports on pilot activity progress
- Report of presentation at SAICM OEWG

Component 2: CHB and RMB co-leads will provide TTA on the development of the tools under output 2.1, and convene regular partner meetings with USEtox, the NCPCs (Sri Lanka and Colombia), BCRC China, Green Building Council, and the Green Electronics Council. Specifically the technical support will include:

CHB TTA:

- Ensuring linkages between project consultants and the UN Environment Chemicals in Products Programme, coordination and consultation with CIP Programme Steering Committee representatives from different sectors.
- Technical support in identification of CoC based on different MEAs and regulatory lists, for all three sectors.

- Liaison with UNEP Finance Initiative and provision of technical assistance on CoC identification and issues.
- Review of consultant studies on legal and regulatory tools for the control of CoC in electronics (regional electronics studies) and toys (toy safety and import review).
- Coordination and chairing of international consultations on the development of voluntary or regulatory approaches for managing and reducing CoC in toys and electronics.

RMB TTA:

- USEtox: liaise on chemical properties information to feed into toxicity models, Inform criteria for procurement and innovation guidelines, other SCP tools, pilot test with products and companies relevant for the project
- General guidebook on the procurement of electronic & buildings products free or with limited amounts of CoCos
- Procurement Guidelines for specific products (building products and electronics)
- Implementing the SPP Approach for CoCo-free Public procurement, in particular pilot tests in Colombia, and SPP guidance in Sri Lanka
- Support in sub-sector selection for building products, linking to SPP and CI information, and support to GBC and NCPC on the general guidance for private sector manufacturers. 1 training in country.
- 2 electronic products with Colombian SPP technical specification related to CoCs. No. of companies proving compliance through eco-label certification, or other means.
- Delivery and support for supply chain training and materials.
- Coordination and review of 2 Regional studies on the management of electronics, towards a circular economy.
- Coordination of component 2, and linkages with other components, dissemination

Annex H: Co-finance Letters

(See PDF file)

Annex I: UNEP Environmental Social and Economic Review Note (ESERN)

a) Project Overview

Identification	GEF ID: 9771
Project Title	<i>Global best practices on emerging chemical policy issues of concern under SAICM</i>
Managing Division	<i>SAICM Secretariat</i>
Type/Location	<i>Global</i>
Region	<i>Global</i>
List Countries	-
Project Description	<p><i>The overall project objective is to accelerate progress in control of EPIs by governments and value chains, by promoting the phase out and replacement of hazardous chemicals in paint, building products, electronics and toys. Upstream actions by governments and value chain actors to replace priority chemicals in supply chains and products will reduce worker and consumer exposure, and environmental releases during manufacture and at end of life. This directly contributes to the 2020 SAICM Goal of ensuring that “chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health”.</i></p> <p><i>Component 1 on lead in paint aims for 40 countries to regulate to establish legal limits to lead paint; and for at least 50 SME paint manufacturers in eight countries to phase out lead from their production processes.</i></p> <p><i>Component 2 on chemicals in products will accelerate adoption of measures by governments and value chains to track and control chemicals in supply chains for building products, electronics and toys. Through the development of global level guidance and tools, including on sustainable public procurement and life cycle assessment, and roll out of these in pilot projects and demonstration to companies in the three sectors the project aims to create pressure for reporting and replacement of hazardous chemicals via new market and economic tools.</i></p> <p><i>Component 3 aims to facilitate countries and other stakeholders to access up to date information on the EPIs, and join communities of practice for peer-to-peer learning exchanges, to support decision making and development of new initiatives towards the 2020 SAICM goal and in line with the 2030 Agenda.</i></p>
Estimated duration of project:	<i>48 months</i>

GEF6 CEO Endorsement /Approval Template-August2016

Estimated cost of the project :	8.19 million USD
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II. Environmental Social and Economic Screening Determination

A. Summary of the Safeguard Risks Triggered

Safeguard Standard Triggered by the Project	Impact of Risk ¹⁰⁷ (1-5)	Probability of Risk (1-5)	Significance of Risk (L, M, H)
SS 1: Biodiversity, natural habitat and Sustainable Management of Living Resources	1	1	L
SS 2: Resource Efficiency, Pollution Prevention and Management of Chemicals and Wastes	1	1	L
SS 3: Safety of Dams	1	1	L
SS 4: Involuntary resettlement	1	1	L
SS 5: Indigenous peoples	1	1	L
SS 6: Labor and working conditions	2	2	L
SS 7: Cultural Heritage	1	1	L
SS 8: Gender equity	1	1	L

¹⁰⁷ Refer to UNEP Environment, Social and Economic Sustainability (ESES): Implementation Guidance Note to assign values to the Impact of Risk and the Probability of Risk to determine the overall significance of Risk (Low, Moderate or High).

SS 9: Economic Sustainability	2	2	L
Additional Safeguard questions for projects seeking GCF-funding (Section IV)			

B. ESE Screening Decision¹⁰⁸ (Refer to the UNEP ESES Framework (Chapter 2) and the UNEP's ESES Guidelines.)

Low risk Moderate risk High risk Additional information required

C. Development of ESE Review Note and Screening Decision:

Prepared by: Name: _____ Melanie Ashton _____ Date: ___26/2/2018___

Safeguard Advisor: Name: _____ Date: _____

Project Manager: Name: _____ Date: _____

D. Recommended further action from the Safeguard Advisor:

¹⁰⁸ **Low risk:** Negative impacts negligible: no further study or impact management required.

Moderate risk: Potential negative impacts, but less significant; few if any impacts irreversible; impact amenable to management using standard mitigation measures; limited environmental or social analysis may be required to develop a ESEMP. Straightforward application of good practice may be sufficient without additional study.

High risk: Potential for significant negative impacts, possibly irreversible, ESEA including a full impact assessment may be required, followed by an effective safeguard management plan.

III. ESES Principle and Safeguard checklist

(Section III and IV should be retained in UNEP)

Precautionary Approach
The project will take precautionary measures even if some cause and effect relationships are not fully established scientifically and there is risk of causing harm to the people or to the environment.
Human Rights Principle
The project will make an effort to include any potentially affected stakeholders, in particular vulnerable and marginalized groups; from the decision making process that may affect them.
The project will respond to any significant concerns or disputes raised during the stakeholder engagement process.
The project will make an effort to avoid inequitable or discriminatory negative impacts on the quality of and access to resources or basic services, on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups. ¹⁰⁹

Screening checklist	Y/N/ Maybe	Comment
Safeguard Standard 1: Biodiversity, natural habitat and Sustainable Management of Living Resources		
Will the proposed project support directly or indirectly any activities that significantly convert or degrade biodiversity and habitat including modified habitat, natural habitat and critical natural habitat?	N	
Will the proposed project likely convert or degrade habitats that are legally protected?	N	
Will the proposed project likely convert or degrade habitats that are officially proposed for protection? (e.g.; National Park, Nature Conservancy, Indigenous Community Conserved Area, (ICCA); etc.)	N	
Will the proposed project likely convert or degrade habitats that are identified by authoritative sources for their high conservation and biodiversity value?	N	
Will the proposed project likely convert or degrade habitats that are recognized- including by authoritative	N	

¹⁰⁹ Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to “women and men” or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

sources and /or the national and local government entity, as protected and conserved by traditional local communities?		
Will the proposed project approach possibly not be legally permitted or inconsistent with any officially recognized management plans for the area?	N	
Will the proposed project activities result in soils deterioration and land degradation?	N	
Will the proposed project interventions cause any changes to the quality or quantity of water in rivers, ponds, lakes or other wetlands?	N	
Will the proposed project possibly introduce or utilize any invasive alien species of flora and fauna, whether accidental or intentional?	N	
Safeguard Standard 2: Resource Efficiency, Pollution Prevention and Management of Chemicals and Wastes		
Will the proposed project likely result in the significant release of pollutants to air, water or soil?	N	The project aims to reduce pollutants (lead, in paint) and chemicals of concern in building, electronics and toys.
Will the proposed project likely consume or cause significant consumption of water, energy or other resources through its own footprint or through the boundary of influence of the activity?	N	
Will the proposed project likely cause significant generation of Green House Gas (GHG) emissions during and/or after the project?	N	
Will the proposed project likely generate wastes, including hazardous waste that cannot be reused, recycled or disposed in an environmentally sound and safe manner?	N	
Will the proposed project use, cause the use of, or manage the use of, storage and disposal of hazardous chemicals, including pesticides?	N	
Will the proposed project involve the manufacturing, trade, release and/or use of hazardous materials subject to international action bans or phase-outs, such as DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Convention on Persistent Organic Pollutants or the Montreal Protocol?	N	
Will the proposed project require the procurement of chemical pesticides that is not a component of integrated pest management (IPM) ¹¹⁰ or integrated vector management (IVM) ¹¹¹ approaches?	N	

¹¹⁰ “Integrated Pest Management (IPM) means the careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment. IPM emphasizes the growth of a healthy crop with the least possible disruption to agro-ecosystems and encourages natural pest control mechanisms <http://www.fao.org/agriculture/crops/thematic-sitemap/theme/pests/ipm/en/>

Will the proposed project require inclusion of chemical pesticides that are included in IPM or IVM but high in human toxicity?	N	
Will the proposed project have difficulty in abiding to FAO's International Code of Conduct ¹¹² in terms of handling, storage, application and disposal of pesticides?	N	
Will the proposed project potentially expose the public to hazardous materials and substances and pose potentially serious risk to human health and the environment?	N	The project aims to reduce current exposure of the public to potentially hazardous substances
Safeguard Standard 3: Safety of Dams		
Will the proposed project involve constructing a new dam(s)?	N	
Will the proposed project involve rehabilitating an existing dam(s)?	N	
Will the proposed project activities involve dam safety operations?	N	
Safeguard Standard 4: Involuntary resettlement		
Will the proposed project likely involve full or partial physical displacement or relocation of people?	N	
Will the proposed project involve involuntary restrictions on land use that deny a community the use of resources to which they have traditional or recognizable use rights?	N	
Will the proposed project likely cause restrictions on access to land or use of resources that are sources of livelihood?	N	
Will the proposed project likely cause or involve temporary/permanent loss of land?	N	
Will the proposed project likely cause or involve economic displacements affecting their crops, businesses, income generation sources and assets?	N	
Will the proposed project likely cause or involve forced eviction?	N	
Will the proposed project likely affect land tenure arrangements, including communal and/or customary/traditional land tenure patterns negatively?	N	
Safeguard Standard 5: Indigenous peoples¹¹³		
Will indigenous peoples be present in the proposed project area or area of influence?	N	
Will the proposed project be located on lands and territories claimed by indigenous peoples?	N	

¹¹¹ "IVM is a rational decision-making process for the optimal use of resources for vector control. The approach seeks to improve the efficacy, cost-effectiveness, ecological soundness and sustainability of disease-vector control. The ultimate goal is to prevent the transmission of vector-borne diseases such as malaria, dengue, Japanese encephalitis, leishmaniasis, schistosomiasis and Chagas disease." (http://www.who.int/neglected_diseases/vector_ecology/ivm_concept/en/)

¹¹² Find more information from http://www.fao.org/fileadmin/templates/agphome/documents/Pests_Pesticides/Code/CODE_2014Sep_ENG.pdf

¹¹³ Refer to the Toolkit for the application of the UNEP Indigenous Peoples Policy Guidance for further information.

Will the proposed project likely affect livelihoods of indigenous peoples negatively through affecting the rights, lands and territories claimed by them?	N	
Will the proposed project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	N	
Will the project negatively affect the development priorities of indigenous peoples defined by them?	N	
Will the project potentially affect the traditional livelihoods, physical and cultural survival of indigenous peoples?	N	
Will the project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	N	
Safeguard Standard 6: Labor and working conditions		
Will the proposed project involve the use of forced labor and child labor?	Maybe	The NCPCs may encounter such labor conditions in the SME sector. Their ToR will include an assessment and monitoring of potential socio-economic consequences of a shift to lead-free production
Will the proposed project cause the increase of local or regional un-employment?	Maybe	
Safeguard Standard 7: Cultural Heritage		
Will the proposed project potentially have negative impact on objects with historical, cultural, artistic, traditional or religious values and archeological sites that are internationally recognized or legally protected?	N	
Will the proposed project rely on or profit from tangible cultural heritage (e.g., tourism)?	N	
Will the proposed project involve land clearing or excavation with the possibility of encountering previously undetected tangible cultural heritage?	N	
Will the proposed project involve in land clearing or excavation?	N	
Safeguard Standard 8: Gender equity		
Will the proposed project likely have inequitable negative impacts on gender equality and/or the situation of women and girls?	N	
Will the proposed project potentially discriminate against women or other groups based on gender, especially regarding participation in the design and implementation or access to opportunities and benefits?	N	
Will the proposed project have impacts that could negatively affect women's and men's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?	N	
Safeguard Standard 9: Economic Sustainability		

Will the proposed project likely bring immediate or short-term net gain to the local communities or countries at the risk of generating long-term economic burden (e.g., agriculture for food vs. biofuel; mangrove vs. commercial shrimp farm in terms of fishing, forest products and protection, etc.)?	Maybe	While the project aims at the opposite situation (short term loss for long term economic gain), there may be temporary losses to SMEs as they adjust to new processes. The NCPCs will monitor of potential socio-economic consequences of a shift to lead-free production and work with regulators to support SMEs in the legislation.
Will the proposed project likely bring unequal economic benefits to a limited subset of the target group?	N	

IV. Additional Safeguard Questions for Projects seeking GCF-funding

Community Health, Safety, and Security			
Will there be potential risks and negative impacts to the health and safety of the Affected Communities during the project life-cycle?			
Will the proposed project involve design, construction, operation and decommissioning of the structural elements such as new buildings or structures?			
Will the proposed project involve constructing new buildings or structures that will be accessed by public?			
Will the proposed project possibly cause direct or indirect health-related risks and impacts to the Affected Communities due to the diminution or degradation of natural resources, and ecosystem services?			
Will the proposed project activities potentially cause community exposure to health issues such as water-borne, water-based, water-related, vector-borne diseases, and communicable diseases?			
In case of an emergency event, will the project team, including partners, have the capacity to respond together with relevant local and national authorities?			
Will the proposed project need to retain workers to provide security to safeguard its personnel and property?			
Labor and Supply Chain			
Will UNEP or the implementing/executing partner(s) involve suppliers of goods and services who may have			

high risk of significant safety issues related to their own workers?			
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Annex J: Acronyms

ABA-ROLI	American Bar Association – Rule of Law Initiative
AMCEN	African Ministerial Conference on Environment
CHB	Chemicals and Health Branch (UN Environment)
CiP	Chemicals in Products
CoC	Chemicals of concern
ECOWAS	Economic Community of West African States
EDCs	Endocrine disrupting chemicals
EEE	Electrical and electronic equipment
EPEAT	Electronic Product Environmental Assessment Tool
EPIs	Emerging policy issues
FSP	Full-sized project
GABC	Global Alliance for Buildings and Construction
GBC	Green Building Council
HEAL	Health and Environment Alliance
IAMC	Innovative Approaches to the Sound Management of Chemicals and Chemical Waste
ICCM	International Conference on Chemicals Management
IOMC	The Inter-Organization Programme for the Sound Management of Chemicals
IPEN	International POPs Elimination Network
IPPIC	International Paint and Print Ink Council
LCA	Lifecycle Assessment
LDCs	Least developed countries
LMIC	Lower and Middle Income Countries
MEAs	Multilateral Environment Agreements
MSP	Medium Sized Project
NCPC	National Cleaner Production Centre
OEWG	Open-Ended Working Group
PAHs	Polycyclic Aromatic Hydrocarbons
PBT	Persistent, bioaccumulative and toxic
POPs	Persistent Organic Pollutants
PSC	Project Steering Committee
RECPnet	Resource Efficient and Cleaner Production Network
RMB	Resources and Markets Branch (UN Environment)
SAICM	Strategic Approach to International Chemicals Management
SCP	Sustainable Consumption and Production
SPP	Sustainable Public Procurement
SIDS	Small Island Developing States
SMEs	Small and Medium-sized enterprises
SRADev	Sustainable Research and Action for Environmental Development, Nigeria
VOCs	Volatile organic compounds
WEEE	Waste Electrical and Electronic Equipment
WHO	World Health Organization