Evaluation Office of UN Environment



Terminal Evaluation of the UN Environment Project "53-P2 Addressing risks posed by exposure to lead and cadmium"



August 2017



Evaluation Office of UN Environment

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This report has been prepared by the independent consultant Dr. Segbedzi Norgbey and is a product of the Evaluation Office of UN Environment. The findings and conclusions expressed herein do not necessarily reflect the views of Member States or the UN Environment Senior Management.

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ABOUT THE EVALUATION¹

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Brief Description: This report is a terminal evaluation of a UN Environment project implemented by the Division of Technology, Industry and Economics. The project's overall development goal was to reduce the anthropogenic uses of lead and cadmium in key products and industry sectors that give rise to particular exposure concerns. The evaluation sought to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UN Environment and their implementing partners including the relevant agencies in the project participating countries.

¹ This data is used to aid the internet search of this report on the Evaluation Office of UN Environment Website

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List of acronyms and abbreviations

C&W	Chemicals and waste
CiP	Chemicals in Products
DCPI	UNEP Division of Communication and Public Information (Now Communications Division)
DELC	UNEP Division of Environmental Laws and Conventions (Now Law Division)
DEPI	UNEP Division of Environmental Policy Implementation (Now Ecosystems Division)
	UNEP Division of Early Warning and Assessments (N UNEP Division of Technology, Industry
DEWA	and Economics (Now Economy Division)ow Science Division
DTIE	UNEP Division of Technology, Industry and Economics (Now Economy Division)
EA	Expected Accomplishment
GAELP	Global Alliance to Eliminate Lead in Paint
GC	Governing Council (of UNEP)
GEF	Global Environment Facility
GITE	Global Initiative on Transport Emissions
HSHW	Hazardous Substances and Hazardous Waste
ICCM	International Conference on Chemicals Management
IETC	International Environment Technology Centre
IGO	Inter-Governmental Organisation
IOMC	Inter-Organization Programme for the Sound Management of Chemicals
IPEN	International Persistent Organic Pollutants Elimination Network
IPIECA	International Petroleum Industry Environmental Conservation Association
IPPIC	International Paint and Printing Ink Council
MEA	Multilateral Environmental Agreement
NGO	Non-Governmental Organization
PCFV	Partnership for Cleaner Fuels and Vehicles
PIMS	Programme Information and Management System
PoW	Programme of Work
QAS	UN Environment Quality Assurance Section
REC	Regional Environmental Centre
ROA	Regional Office for Africa
ROAP	Regional Office for Asia and Pacific

ROLAC	Regional Office of Latin America and the Caribbean
ROWA	Regional Office for West Asia
SAICM	Strategic Approach to International Chemicals Management
ТоС	Theory of Change
ToR	Terms of Reference
UNCRD	United Nations Centre for Regional Development
UNITAR	United Nations Institute for Training and Research
UNDP	United Nations Development Programme
UNDESA	United Nations Department of Economic and Social Affairs
UNEA	United Nations Environment Assembly
UNEP	United Nations Environment Programme
WHO	World Health Organization

EXECUTIVE SUMMARY

Introduction

The Evaluation of the project "Addressing risks posed by exposure to lead and cadmium" was designed to assess the relevance and overall performance of UN Environment's work related to Lead and Cadmium from 2010 to 2016 according to standard evaluation criteria (relevance, efficiency, effectiveness, sustainability and impact). The Evaluation has a dual purpose: providing a basis for accountability on project performance and drawing lessons from experience for improvement of future projects. The Evaluation considers whether, in the period under review, UNEP was able to contribute significantly to reducing the impact of cadmium and lead on the environment and human beings.

In particular, the Evaluation examines the effectiveness of management arrangements and for project implementation for the delivery of project outputs and outcomes. Partnerships with other UN bodies, Inter-Governmental Organizations and institutions, regional bodies, national governments, NGOs, scientific and environmental centres, and private sector organizations are also reviewed.

Strategic relevance of the Chemicals and Waste Sub-programme

This project was derived from and is consistent with UN Environment's strategy for dealing with Harmful Substances and Hazardous Waste which was itself based on UN Environment's earlier work in addressing the environmental dimension of the management of harmful substances. The project was designed to respond to several UN Environment Governing Council Decisions including (GC25/5 II) which requested UN Environment to finalize scientific reviews of lead and cadmium by taking into account the latest available information and to report its findings to GC 26 in February of 2011 with a view of informing discussions on the need for global action.

A key component of the project, the Partnership for Clean Fuels and Vehicles (PCFV) had earlier been launched at the World Summit on Sustainable Development in 2002 in Johannesburg with the aim of supporting developing countries to reduce air pollution through the phase-out of leaded gasoline. The project is therefore relevant to UN Environment's mandate including the need to reduce exposure of lead and cadmium to humans and the environment.

Effectiveness

In approximately 6 years of project implementation, substantial progress on working with key partners and stakeholders for common approaches to lead and cadmium, including participation and endorsement of the Lead Paint Alliance work through ICCM4 and the subregional workshop had been made. The follow-up on Lead and Cadmium issues in relation to the compilation of information for UN Environment's Governing body (UNEA1 Resolution) was achieved in the form of a draft compiled document. The Lead Paint Alliance successfully established a new Advisory Group and has since focused on short-term actions in line with the Business Plan. Interest of the international community increased both through the lead and cadmium work and the lead paint alliance work as a result of a United Nations Environment Assembly (UNEA1) Resolution which targeted lead and cadmium. The partnership for Cleaner Fuels and Vehicles (PCFV) has continued to bring partners together to work towards the global elimination of leaded petrol Delivery through external partnerships has not only been very cost-effective but has also actively contributed to the strengthening of partnerships and increased interest from both industry and countries in UN Environment's technical tools, methodologies and strategic framework for reducing risks in the production, handling, use and disposal of harmful substances

One aspect of the project that has not seen any significant activity is work on cadmium. While studies had been completed on cadmium in products, alternatives, relevant technologies etc., no significant activities were undertaken towards the management of the risk of exposure to cadmium and its environmental impacts. Indeed, it would seem that a clear strategy for the management of cadmium needs to be developed and perhaps on how to deal with heavy metals in general. Evidence for the implementation of the planned assessment of laboratory capacity on the analysis of compounds in the environment and in humans does not seem to exist.

Likelihood of impact

Results from the implementation of the project show that the project is making progress along the pathway from results to impact. Indeed in some cases, it has been shown that the impact of the project can be determined and in some cases quantified. Increased knowledge of the health risks of cadmium and lead was achieved through the production of communication and information materials on the public health and environmental impacts of leaded fuels and lead in paint which was distributed widely to government officials, project stakeholders and the general public. UN Environment's study on trade in products containing cadmium, lead and mercury as well as other assessments on the heavy metals formed a basis for discussion on the global chemicals agenda. The materials created knowledge which in turn promoted action among governments to develop legislation to form the basis for phasing out leaded fuels. With respect to the Global Alliance, such a process is still on-going.

Simultaneously with creating knowledge and raising awareness the project supported governments and industry through capacity building and the development of options for managing the problem of lead through several workshops such as the East African regional workshop in Ethiopia in December 2015 by UN Environment. Fifteen (15) participating African countries agreed to work towards establishing national laws to limit lead in paint. With respect to long-term political will, the PCFV was very successful in getting the commitment of governments and industry to phase out the production and distribution of leaded gasoline.

Several pre-phase-out and post-phase-out studies based on blood lead level testing have concluded that there have been quantifiable gains in the reduction in blood lead levels attributable to lead phase-out in gasoline. In Kenya, blood lead levels reduced by 38%. Two studies reviewed for this evaluation are consistent with results found in other parts of the world where phase-out had been achieved.

Efficiency

The project built on tools and methodologies developed in previous biennia. For example, awareness-raising activities for countries to take decisions to minimize the risk of lead and cadmium continues to be a key element for the successful implementation of the Partnership for Cleaner Fuels and Vehicles (PCFV), Global Alliance to Eliminate Lead Paint (GAELP) and the support provided to governments and industry.

In general, efficiencies are either built into project design or have been realised through the use of proven models which allowed the project to roll-out activities to a wider group of stakeholders, sometimes through workshops and training programmes. The project also took advantage of existing meetings to create awareness and get the regions involved. The close involvement of Regional Offices, in some cases, increased efficiency as project implementation benefited from their intimate regional knowledge, contacts and experience.

Inefficiencies included slow project start-up for a variety of reasons including lateness in project approvals, administrative delays in access to systems, efficiency challenges in the level of support that professional officers have access to within the Chemicals Branch, that can lead to professionals having to undertake some of the administrative work themselves, and insufficient funds. Underlying some of these challenges was staff shortages, which might have been offset through, for example, increased cooperation with Regional Offices or more effective use of partnerships. These delays were common across the two biennia. Other challenges involve reporting delays due to PIMS functionality and staff attention to reporting. Indeed, information obtained on this project through PIMS was scanty and could not have facilitated detailed assessment of the activities implemented. Perhaps better training on reporting in PIMS would improve data availability for monitoring, reporting and evaluation.

Factors affecting project performance

Project planning & design

The project was clearly drafted. It clearly described its relevance to Governing Council Decisions, the related medium term strategy and its programmes of work in section 3 of the project document. A key strength is the detailed analysis of various stakeholders expected to participate in project implementation.

With regards to the logframe, this evaluation notes that the project log-frame considers both PoW outputs and Expected Accomplishments (EAs) as project outcomes. In effect, project outcomes are set at a higher results level than the direct outcomes of the project which end up as intermediate states. This means that the direct project outcomes do not have relevant indicators in the logframe to measure them.

Project management

In general, the project relied extensively on UN Environment's partners for the successful implementation of project activities. The approach to project implementation consisted of two partnerships one modelled after the other which is an on-going successful partnership of the PCFV. As implemented, the Partnerships seemed to have worked and continue to work very well. The Partnership Advisory Groups which are representative of the broad range of partners provided guidance on strategic and financial issues, as well as advice on general management of the Secretariats.

Regarding the internal organization of the Lead and Cadmium project, the project was managed by the Division of Technology Industry and Economics' transport and chemicals units. The Transport Unit being responsible for continuing implementation of the Partnership for Clean Fuels and Vehicles while the Chemicals Unit had responsibility for the Lead in Paint initiative (the Global Alliance). The Regional Offices, ROA, ROAP and ROLAC played awareness-raising roles in the respective regions of the activities of the partnerships. They also facilitated access to the various countries targeted for partnership activities. The

Division of Communication and Pubic Information assisted in preparing public information materials targeting various stakeholder groups.

There has been a relatively low turnover rate of Professional and General Service staff. Staff appear to be competent, knowledgeable and enthusiastic. It would seem however that human resource numbers are insufficient, particularly in the GAELP to support project implementation.

Project monitoring, reporting and evaluation

A monitoring plan was included in the project document. Milestones seem adequate for measuring implementation progress. However, Project Information Management System (PIMS) reporting was grossly inadequate. A substantial portion of the information used in this report on the achievement of planned project outputs was derived from other sources (activity reports of the lead in Paint Partnership and interviews) than in PIMS, the intended primary source of organisational level information on project monitoring. Resources allocated for reporting and evaluation were inadequate however for undertaking a field-based evaluation. Monitoring was not properly costed at project design.

Recommendations

- i. Individual countries that participated in the PCFV knew what benefits they could get from phase out of leaded fuel; however, the regional approach to GAELP implementation is likely to leave a lot of the initiative to governments and, for that matter, will result in slow progress towards the elimination of leaded paint. While the regional approach may be a good starting point, successful elimination of lead in paint is likely to involve more intensive country level engagement to develop laws and standards as well as increase engagement of the private sector. This evaluation recommends that the Advisory Group should review and exhaustively discuss strengthened national level engagements.
- ii. A key component of the Global Alliance now involves development of a legal framework document for adoption by the various partner governments. However, this was not provided for in the project. Therefore, resources were not provided to develop such a framework. Interviews with the Division of Environmental Law and Conventions showed dissatisfaction with the situation where there was no provision for a role for legal work in the project. This evaluation recommends that in follow-up projects to this project, activities should be included and fully funded to provide support to governments and other stakeholders on legal regimes for the elimination of lead in paint to be implemented by the Division of Law and Conventions
- iii. While it is good business practice to tailor implementation approaches to available resources, it would seem that the regional approach proposed for the GAELP while taking advantage of regional trade collaboration, will also require aggressive engagement at the country level to promote resource mobilization. This evaluation recommends that the GAELP Advisory Group considers strengthened efforts for national approach level engagement as a way of committing governments to allocate national resources to this effort rather than wait for donor funding since it would seem as if the project is being imposed from outside.

- iv. In order to strengthen the Global Alliance for the Elimination of Lead in Paint, the following actions should be taken by UN Environment and WHO:
- Approach companies at the level of the Executive Director of the UN Environment
- Similarly invite paint raw materials suppliers to join the alliance
- While there is the option to invite individual companies, the Alliance should consider working through industry Associations
- Influential stakeholders groups such as professional from the health, consumer protection and children's health sectors should be invited to join the GAELP as a matter of priority
 - v. Regarding cadmium, while an updated study has been done, the policy story has yet to be told. There is a clear need for follow-up to develop an approach to the management of the risk of exposure and its implications for human health and the environment. Indeed, it would seem that the UN Environment needs to develop a clear strategy for the management of cadmium and perhaps on how to deal with heavy metals in general.
 - vi. This evaluation suggests that in future follow-up projects a clear distinction should be made between monitoring for adaptive project management and monitoring for reporting purposes and resources allocated to both to enable adequate data collection and reporting in the Project Information Management system.

Table 1: Project Identification²

UN Environment PIMS ID:	00679	IMIS number:	3B99
Sub-programme:	Chemicals and Waste	Expected Accomplishment(s):	EA (b) Countries, including Major Groups and stakeholders, increasingly use the scientific and technical knowledge and tools needed to implement sound chemicals management and the related MEAs
UN Environment approval date:	18 November 2014	PoW Output(s):	2014/15-524 2012/13-523 2010/11-532
Managing division:	Technology, Industry and Economics (DTIE)	Other Divisions:	DCPI, DELC ROs in particular ROAP, ROA,ROE and ROLAC
Expected Start Date:	01 Jul 2010	Actual start date:	18 Nov 2010
Planned completion date:	31 Dec 2015	Actual completion date:	31 Dec 2015
Planned project budget at approval:	\$6,386,873.00	Planned Extra-budgetary financing (XBF):	\$ 6,435,426.00
Planned Environment Fund allocation:	50,0003	Total Secured Funds :	\$ 6,485,426.00
No. of revisions:	2 (1st 11/2012, 2nd 07/2015)	Date of last revision:	21 July 2015
Terminal Evaluation (actual date):	August 2016	Mid-term review/ evaluation (actual date):	N/A4

² Source: PIMS and Project Document Revision July 2015

³ Implementation of UNEA 1/5 on regional workshops on Lead in Paint (WBSE SB-000170.02 Cost centre 11218)

⁴ The most recent evaluation of the PCFV part was in 2010, available from <u>http://www.unep.org/transport/pcfv/PDF/leadphaseoutreport.pdf</u>

1. In July 2010, UN Environment initiated the project "53-P2 Addressing risks posed by exposure to lead and cadmium" (hereafter referred to as the "project"), designed to respond to Governing Council decisions 22/4 III, 23/9 III, 24/3 III and 25/5 II that reaffirm international interest in reducing the environmental health risks posed by lead and cadmium. In general, the project has specific focus on developing countries and countries with economies in transition. This is because some uses of lead and cadmium that have been phased out in industrialized countries continue in these countries, and the regulations and restrictions are less comprehensive or less well enforced in developing regions. Local and regional health and environmental risks are associated with the use, management (including collection, storage, recycling and treatment) and disposal of products containing lead and cadmium. In some developing countries and countries with economies in transition, the poorest people are scavenging through waste disposal sites for recovery, and subsequent recycling, of these toxic heavy metals. This has resulted in elevated health and environmental risks. The export of new and used products containing lead and cadmium, including electronic equipment and batteries, to countries that lack the capacity to manage and dispose of them in an environmentally sound manner at the end of their life, represents a growing threat of continued exposure to these heavy metals.

2. Ultimate beneficiaries of this project included communities and individuals impacted negatively by the use of lead-based additives in vehicle fuels, lead in paint and products containing lead, cadmium and mercury (e.g. in toys and batteries). The activities under this project were expected to lead to multiple benefits by way of improved environmental and human conditions at the regional, national and/or local levels. The project effectively came to an end in December 2015 even though some project activities are still under implementation.

1.1 Context of the Project

3. Besides mercury, which is now governed by a Multilateral Environmental Agreement (MEA), lead and cadmium are two heavy metals that have been the focus of activity for the United Nations Environment Programme (UNEP or UN Environment). Lead and Cadmium are ubiquitous in the environment and are toxic to plants, animals and micro-organisms. A review of the scientific literature on lead, in particular, shows that the heavy metal is toxic at very low exposure levels and has acute and chronic effects on human health and the environment. Young children are particularly vulnerable to the toxic effects of lead and can suffer profound and permanent adverse health effects, particularly with regards to the development of the brain and nervous system. Lead also causes long-term harm in adults, including increased risk of high blood pressure and kidney damage⁵. Lead toxicity is irreversible and its effects generally appear to persist into adolescence. A similar review of scientific information shows that, like lead, cadmium is a non-essential and toxic element to humans, mainly affecting kidneys and the skeleton. It is also a carcinogen by inhalation and is accumulated in bone, and may serve as a source of exposure later in life. In the environment, cadmium is toxic to plants, animals and micro-organisms.

⁵ http://www.who.int/mediacentre/factsheets/fs379/en/

4. Lead and cadmium are considered trans-boundary pollutants. As elements, they are both persistent. They are produced and traded globally for use in various products, and the export of new and used products containing lead and cadmium remains a challenge for developing countries and countries with economies in transition, which lack the capacity to manage and dispose of these substances in an environmentally sound manner.

5. The UN Environment Governing council has sought to reduce risks to human health and the environment from lead and cadmium throughout their life-cycles, and to take action to promote the use (where appropriate) of lead and cadmium-free alternatives. UN Environment has been mandated to address lead and cadmium issues since 2001. The Partnership for Clean Fuels and Vehicles (PCFV), coordinated by UN Environment, was launched at the World Summit on Sustainable Development in Johannesburg in 2002 in order to support developing countries in their efforts to reduce air pollution by developing and implementing action plans to complete the global elimination of leaded gasoline. The lead phase-out campaign efforts by the PCFV complemented other important UN activities related to transport and air quality, including World Health Organisation, United Nations Department of Economic and Social Affairs (UNDESA's) Global Initiative on Transport Emissions (GITE), UN Environment DTIE's transport activities, United Nations Centre for Regional Development (UNCRD's) environmentally sustainable transport project and UN Environment/UN-Habitat cooperation on programmes like the Cities Alliance and the Sustainable Cities Programme. In addition, the Partnership has worked with the on-going Clean Air Initiative of the World Bank in Africa and Asian Development Bank in Asia, and the US Environment Protection Agency (EPA) Clean Energy Initiative.

1.2 Project objective and components

6. The primary objective of the project was to reduce the anthropogenic uses of lead and cadmium in key products and industry sectors that give rise to particular exposure concerns. The project comprised of four components that were expected to deliver on this objective through interventions related to key uses of lead and cadmium that were considered of particular concern. These include:

Component 1: Promoting the elimination of the use of lead-based additives in vehicle fuels: Partnership for Clean Fuels and Vehicles (PCFV)

7. The Economy Division's (Transport Unit) has, for some years, successfully promoted the phase out of lead from vehicle fuels through the Partnership for Clean Fuels and Vehicles (PCFV). This component focused on the countries where leaded fuels were still in use. The following activities were carried out under this component:

Activity 1: Coordination of the Global Partnership on Clean Fuels and Vehicles;

Activity 2: Awareness raising and engagement with industry and other partners to support 10 countries to prepare national action plans to implement the phase out of leaded vehicle fuel;

Activity 3: Effectiveness monitoring: Blood lead testing and fuel verification programme to verify compliance;

Activity 4: Develop a global programme and partnership with International Civil Aviation Organisation to promote the phase-out of leaded aviation fuels.

Component 2: Promoting the phase out of lead in paint: Global Alliance to Eliminate Lead Paint

8. Responding to a request from the second session of the International Conference on Chemicals Management (ICCM), UN Environment and the World Health Organisation established a Global Alliance to Eliminate Lead Paint. The Global Alliance seeks to engage a wide range of partners with regional balance. The following activities were designed to respond to the ICCM request:

Activity 5: Establish and coordinate, with the World Health Organization, a Global Alliance to Eliminate Lead Paint based on the PCFV and Global Mercury Partnership models and engaging other Inter Governmental Organizations (IGOs), governments, industry associations, civil society organisations, and academia. Develop partnership web presence and publicity materials to encourage participation. Hold meetings of partners to advance partnership aims and activities;

Activity 6: Outreach to industry in relation to the risks posed by lead in paint and gather information on existing production and use of lead compounds in paint in order to promote their elimination from paint formulations or their substitution with available alternatives;

Activity 7: Gather information on existing regulatory and voluntary schemes, including certification schemes and procurement practices, that eliminate the use of leadbased paint; assess their effectiveness and promote appropriate initiatives; develop appropriate guidance materials for key stakeholders;

Activity 8: Assess the need for laboratory capacity for the analysis of lead compounds in environmental media and humans; compile, develop and disseminate guidelines for simple means of identifying lead-based paints.

Component 3: Reducing risks to human health and the environment of lead and cadmium through their life cycle and promoting the use of lead- and cadmium-free alternatives:

9. Under this component, further studies of the trade of products containing lead, cadmium and mercury were to be undertaken in Latin America and Asia-Pacific to complement the existing study from the Africa region. The following activities were carried out:

Activity 9: Develop studies in Asia-Pacific and Latin America, on the trade of products containing lead, cadmium and mercury and their possible effects on human health and the environment;

Activity 10: Facilitate actions to address the reduction of risks to human health and the environment of lead and cadmium through their life-cycle, in particular, but not limited to the issue of lead and cadmium batteries;

Activity 11: Wide spread communication and information materials targeting specific stakeholder groups aiming to raise awareness and mobilize action on harmful substances and hazardous waste.

Component 4: Informing intergovernmental discussions on the need for global action in relation to lead and cadmium:

10. This component was normative and provided a direct response to requests from UN Environment Governing Council for information to assist in its deliberations on the need for global action in relation to lead and cadmium. Activities planned were designed to be completed in time for the results to be included in the papers for UN Environment Governing Council 26 in 2011.

Activity 12: Finalize the reviews of scientific information on lead and cadmium, and companion documents, in accordance with UN Environment Governing Council decision 25/5 II;

Activity 13: Prepare UN Environment Governing Council documents to report back to its 26th session with a view to informing discussions on the need for global action in relation to lead and cadmium.

11. The project's Logical Framework (included in the project document and TOR) defines the expected outcomes, planned outputs, outcome indicators, and means of their verification. Components 3 and 4 were merged in the 2012 revision of the project document into a new Project Output 3 "providing support to Governments and industry to reduce risks to human health and the environment of lead and cadmium through the whole life cycle of those substances and to take action to promote the use of lead and cadmium-free alternatives, for instance in toys and paint".

1.3 Strategic Partnerships and Institutional Arrangements

12. The implementing agency was UN Environment and responsibility for project implementation and coordination was with the UN Environment Division of Technology, Industry and Economics (now Economy Division), under both the Transport and Chemicals branches. Other participating offices included the UN Environment Division of Communication and Public Information (now Communications Division), and UN Environment regional offices in Latin America (ROLAC), Asia Pacific (ROAP) and Africa (ROA).

13. In addition to UN partners, and the governments of the participating countries, the following organizations were also key convening partners that provided the stakeholder perspective, established networks, technical experience and capacity building support. They were mainly drawn from the private sector, the academic and scientific community, intergovernmental organizations, civil society organizations, as well as PCFV and GAELP Partners and donors.

14. **Component 1:** International Petroleum Industry Environmental Conservation Association (IPIECA), FIA Foundation, United States Environmental Protection Agency (USEPA), Regional Environmental Centre (REC), ExxonMobil, Afton Chemical and International Civil Aviation Organization

15. **Component 2:** World Health Organization, United Nations Industrial Development Organization , the Global Environment Facility (GEF), United States Environmental Protection Agency (USEPA), IPEN, Health and Environment Alliance, International Paint and Printing Ink Council (IPPIC),

16. **Component 3:** OK International, Battery Council International, Basel Convention regional centres, International Lead Management Centre, IPEN

17. **Component 4:** In addition to UN partners, all governments played a key role to the activities for this component. While participating in the discussions on the need for global action in relation to lead and cadmium, ultimately governments were expected to support continuation and/or initiation of actions to address UN Environment GC decisions, in particular arising from GC26.

1.4 Project Cost and Financing

18. The approved project budget, following several revisions, was US\$ 6,485,426.00, including funding for pre-2010 activities. The breakdown of the project budget is presented in Table 2 below:

Table 2: Project Budget Estimate

Original Project Document 2010-2011

Cost to:	US\$ pre 2010-11	US\$ 2010-11	US post 2010-11	US\$ Total
Other Contributions:				
XB for Component 1 as follows: ExxonMobil		70,000		
FIA Foundation		5,000	5,000	
IPIECA		4,500	4,500	
USEPA 12 donors support to the PCFV prior to 2010	3,382,213	297,000	105,815	
Total XB secured for component 1:	0.000.010	076 500	115015	
Total unsecured for component 1:	3,382,213	376,500	115,315	
Total direct cost for component 1:		213,000 589,500		
XB for Components 2 to 4 are as follows: Spain: Earmarked for lead and cadmium work on Latin American countries				
Contribution of 100,000 euros (US\$143,884; received week 37 of 2009)				
Switzerland		125,179		
Earmarked for lead and cadmium work with especial focus on lead Contribution of CHF 100,000 (= US\$97,070.87 received week 45 of 2009)				
Sweden and the Nordic Council of Ministers		84,452		
Earmarked for the elaboration of the studies in Asia-Pacific and Latin America on the trade of product containing lead, cadmium and mercury and their possible effects on human health and the environment				
Contribution of 500,000 DKK (approx. US\$ 96,688 ; * not yet received as at today)				
US (USEPA)		* 89,526		

Cost to:	US\$ pre 2010-11	US\$ 2010-11	US post 2010-11	US\$ Total
Earmarked for the global partnership to promote phase out of lead in paints. Contribution of US\$ 50,000 (* not yet received as at today)				
Sweden and the Nordic Council of Ministers		*44,248		
Total XB secured for components 2 to 4:	180.000			
Total unsecured for components 2 to 4;		343.405		
Total direct cost for components 2 to 4:		790.595		
Total unsecured costs (Components 1 to 4)		1.134,000		
Total Direct Cost (Components 1 to 4)		1.003,595		
Programme Support Cost (%)		1.723,500		
For component 1		18,705		
For components 2 to 4 from:		12.619		
Spain (13%)		7.162		
Switzerland (13%)		5.752		
Sweden and the Nordic Council of Ministers (8%)		-, -		
US (USEPA)				
Total Programme Support Cost (%)		44,238		
Total support costs for unsecure XB components 2 to 4		102,777		
Total support cost		147,015		
Total cost		1.870,515		

Revision 2012

Соят то:	US\$ pre 2012-13	US\$ 2012-13	US post 2012-13	US\$ Total
Total cost <i>component 1</i> Support provided to governments and industry to phase out lead-based additives in vehicle fuels and to initiate/engage dialogue with ICAO to address lead in aviation fuels		340,000		340,000
Total cost <i>components 2 and 3</i> Options identified for addressing and managing the elimination of lead paint, and continue reducing risks posed by exposure to lead and cadmium through relevant		1,030,000		1,030,000
activities, respectively		1,370,000		1,370,000
		102,307		102,307
Total cost of activities (excl PSC) revised 53-P2 for 2012/2013 PSC @13% (excluding PCFV TF) <u>Total project cost</u>		<u>1,472,307</u>		<u>1,472,307</u>
Secured:	20,000	20,000	20,000	60,000
	3,943,000	85,752		4,028,752
<u>XB</u>		33,224		33,224
IPIECA (component 1)	89,526			89,526
USEPA 12 donors support to the PCFV (component 1)	125,179			125,179
	84,452	••••••		84,452
FIA Foundation (component 1)	44,248			44,248
Nordic Council of Ministers (component 3)	129,377	100,000		229,377
	396,544	300,000		696,544
Spain (components 2 and 3)		243,024		243,024
Switzerland (components 2 and 3) US (components 2 and 3) SIDA PCA (for 12/13 subject to confirmation of allocation)	4,832,326	782,000		5,614,326
 Norway PCA (for 2012/13 subject to confirmation of allocation) 				

Соят то:	US\$ pre 2012-13	US\$ 2012-13	US post 2012-13	US\$ Total
Balance of 2010/11 SIDA and Norway allocations available for 2012				
Total contributions				
Programme Support Costs)				
Other contributions	82,240	51,442		133,682
TOTAL SECURED	4,914,566	833,442		5,748,008
Total unsecured (including PSC)		638,865		638,865
Total		1,472,307		6,386,873

Revision 2015

Overall Budget	Amount USD	
A: Previously approved planned budget (from the last revision)	6, 485,426	
B: Previously secured budget (from the last revision) (from IMIS)	5,748,008	
C: Total change of budget [sum of (i)+(ii)+(iii)+(iv)]	737,418	
i) Norway Allocation (2014)	100,000	
ii) Swiss Financial contributions (CHF 200,000 = USD 207,409)	207,409	
iii) US EPA cooperative agreement (Lead Paint for	215,009	
USD 165,000	165,000	
iv) Environment Fund (Implementation of UNEA 1/5 on regional workshops on Lead in Daiet (WISSE SD 000170 02 Cost costro 11019)		
	50,000	
D: Total revised secured budget (B+C)		
E: Unsecured budget (F-D)		
F: New total for proposed planned budget	Component 1: 10,000	
	Component 2 & 3: 68,993	
	Evaluation: 20,000	
For the current project revision the planned budget is indicated by component, as		
	Total: USD 108,993	

1.5 Modifications to project design before or during Implementation

19. While refinements were made at the higher results levels (Expected Accomplishments and Programme of Work Outputs) to which the project contributes over the biennia covered by the project, they did not affect the design of the project. Indeed, no significant changes were made at the results level. The changes were mainly a restatement of results for clarity at the expected accomplishment level. Previous project outputs 3 and 4 from PoW 2010/11 had been merged for PoW 2012/13 to provide support to governments and industry in reducing risks to human health and the environment of lead and cadmium through the whole life cycle of the substances and to take action to promote the use of lead and cadmium-free alternatives, for instance, in toys and paint but did not affect the delivery of project outputs and outcomes. For the most part, the two revisions to the project (1st 11/2012, 2nd 07/2015) were designed to introduce financial contributions from the

Governments of Sweden and Norway over the biennia. The second revision to the project document in 2012 introduced additional resources and extended the completion date of the project to December 2015 and re-scheduled expenditures accordingly.

1.6 Project Theory of Change

20. An explicit Theory of Change (TOC) to monitor progress towards results was not required at the time of the development of the project and none was developed. For the purpose of this evaluation, a draft Theory of Change was been reconstructed in order to gain a better understanding of the conceptual thinking behind project design and to assist with the assessment of project effectiveness and likelihood of impact, sustainability and upscaling. The reconstructed Theory of Change of the project seeks to define:

- i. nature and scope of the changes to which the project is expected to contribute;
- cause-effect relationships between outputs delivered by the project and expected higher-level changes (also called results chains or causal pathways);
- iii. external factors and conditions that would allow the project to achieve the expected higher-level changes. These are considered in two groups: assumptions are external conditions over which the project has no influence or control; drivers are external factors that the project can influence with specific activities or outputs; and
- iv. role of key stakeholders in making those changes happen.

21. The reconstructed Theory of Change enhances our common understanding of the underlying programme logic. It depicts what and how the project planned and achieved results and maps out the underlying intervention logic, identifying key drivers of impact and the underlying assumptions.

22. Figure 1.0 presents the draft reconstructed Theory of Change of the project based on the actual results statements in the project document which have been "broken up" and rearranged to better conform to UN Environment definitions of the different results levels⁶ and to show the theoretical cause-effect relationships. The draft reconstructed Theory of change was shared with project staff in Geneva.

23. The reconstructed Theory of Change shows how this global project is centred on conducting assessments, monitoring and managing risks to human health and the environment posed by lead and cadmium on different dimensions: awareness and information, policy options for addressing risk, and technical and methodological capacity building to strengthen implementation of related existing Multi- Lateral environmental Agreements (MEAs) on know-how. These are the direct outcomes expected against which project effectiveness will be assessed. Direct outcomes are expected to be achieved through a diverse set of outputs. These are presented at the bottom of the TOC diagram, grouped along the direct outcomes they are expected to contribute to. As firm evidence of

⁶ UNEP Programme Manual – November 2012 version. **Outputs** are defined as products and services which result from the completion of activities within an intervention. **Outcomes** are intended or achieved short-term and medium-term effects of an intervention's outputs, usually requiring the collective effort of partners. Outcomes represent changes which occur between the completion of outputs and the achievement of impact. Outcomes could be a change in capacity (immediate outcome) or behaviour (medium-term outcome). **Impact** is defined as positive and negative, primary and secondary, lasting and significant effects contributed to by an intervention. In UNEP, these effects usually concern the environment, and how it affects human life and livelihoods.

achievement of direct outcomes might be scarce in some cases, the effectiveness evaluation relied partly on an assessment of the relevance, quality and timeliness of outputs delivered by the project.

24. The project objective is to reduce anthropogenic uses of lead and cadmium in key products and industry sector that give rise to particular exposure risks. These reductions in exposure risks are expected to occur on different dimensions that correspond with putting to use the enhanced capacities achieved at the direct outcome level. The project objective is actually an intermediate state towards a desired impact, which is that the risk of exposure to lead and cadmium is reduced.

25. For changes to happen along the causal chain a number of external conditions need to be met or external factors need to be present. Key assumptions made by the project (over which the project has no influence) are that Governments, IGOs, NGO and industry who are key partners give attention and support to maintaining the partnership to reduce exposure risks. Others include lack of long-term political commitment of the partner countries in achieving project objectives, and adequate human and financial resources. Another assumption is that consumer behaviour changes on a wide scale, transitioning to sustainable consumption patterns. Key drivers for change are that the Partnership for Cleaner Fuels and vehicles (PCFV) which successfully eliminated lead in vehicle fuels will serve as a model for lead in paint phase out; UN Environment is working with the GEF to seek financial support to lead and cadmium phase-out; on-going partnerships with International Civil Aviation Organization and World Health Organization will provide the platform for implementing a program to reduce lead and cadmium exposure risks, and UN Environment's study on trade in products containing cadmium, lead and mercury as well as other assessments on the heavy metals will form the basis for discussion on the global chemicals agenda.

26. The evaluation assessed the likelihood that the project contributes to the desired impact, by combining evidence about project effectiveness (i.e. contribution to direct outcomes), progress on the project objective (i.e. the intermediate state towards impact) and validity of assumptions and presence of drivers. The latter will also provide the basis for assessing the likelihood of sustainability and up-scaling of project achievements.

Figure 1.0: Reconstructed Theory of Change



TOC: Addressing risks posed by exposure to lead and cadmium

2.1 **Objective and Scope of the Evaluation**

27. The objective of the evaluation is to assess project performance (in terms of relevance, effectiveness and efficiency), and to determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UN Environment and the main project partners. The evaluation will identify lessons of operational relevance for future project formulation and implementation especially for the continuation of UN Environments' activities in the area of lead and cadmium. The key questions to be addressed by the evaluation as articulated in the Terms of Reference (annex 5) are the following:

- a. To what extent has the project contributed to an increased number of national/regional policies and control systems for implementing international obligations with regards to harmful chemicals and waste, and in particular the chemicals of concern i.e. lead and cadmium?
- b. To what extent have the project activities, including support provided to government and industry, served to demonstrate and replicate good practices for global environmentally sound management of lead and cadmium at country level? Are there emerging evidence of reduced risks to human health and the environment from lead and cadmium that can be readily attributed to the project's initiative?
- c. To what degree of success was the communication strategy for lead and cadmium implemented? How well have project achievements, information, and reporting materials been communicated at global/regional/national levels to raise awareness and mobilize action on the environmental and health risks of lead and cadmium?
- d. In retrospect, how did revisions to the project's logical framework affect the intervention's likelihood to achieve its intended goal of reducing the anthropogenic uses of lead and cadmium in key products and industry sectors that give rise to particular exposure concerns?
- e. What were the most effective coordination and management strategies used by the project, and what were the key drivers and assumptions required to influence the achievement of planned outcomes? What were the key challenges to project implementation and what remedies can be proposed to enhance the implementation of similar projects in the future?

2.2 Approach and Methods

2.2.1 Approach

28. This evaluation has been an in-depth, independent exercise conducted with oversight from the UN Environment Evaluation Office. This section describes the methods used for data collection in response to the objectives, key questions and indicators. The following principles formed the basis of the approach used:

- Focus on results: Expected results, performance indicators, as well as potential risks are identified to ensure coherent and integrated results based management (RBM) to frame the evaluation.
- Learning: The evaluator adapted RBM principles, tools and indicators (i.e. the evaluation matrix), based on the needs and context of this evaluation with the aim of increasing the potential for learning and focus on the achievements of the project.
- Participatory approach: The evaluation process has been consultative and collaborative with the UN Environment staff members - Project Coordinator, Programme/project managers, UN Environment Evaluation Office and the Office for Operations (OfO) - and other relevant internal and external stakeholders who will be kept informed and regularly consulted throughout the assessment.
- Evidence-based: The evaluation sought to, and gained sights and conclusions based on a variety of data and data collection methods, and, wherever possible, triangulating information in order to ensure the reliability and validity of evaluation analysis and conclusions.



Figure 2 below is a representation of the evaluation approach and key methodological elements.

2.2.2 Methods

29. The Evaluation was organized in three overlapping phases. During the **inception phase**, the Evaluator conducted a documentation review and a number of key interviews in UN Environment to get a clearer grasp of the evaluation context and fine-tune the evaluation approach. The Evaluator drafted an Inception Report which was reviewed by the Evaluation Office and shared with the UN Environment project manager and his team for comment. While the Inception Report was under review, the Evaluator started off the **data collection and analysis phase** with more in-depth review of project implementation reports and

additional phone interviews with project stakeholders. During the **reporting phase**, the Evaluator prepared a draft evaluation report and the final evaluation report, which was shared widely for comment.

30. Findings from the Inception review further informed the methods used for this evaluation and enable refinement of the evaluation framework by filling information gaps and helping to identify further data collection needs. The preliminary list of project documents reviewed by the consultant is contained in Annex 6.

31. Both primary and secondary data were collected and analysed as part of the evaluation process. Secondary data was obtained mainly from the UN Environment Evaluation Office, UN Environment Nairobi and Geneva offices, as well as relevant partners and other organizations including members of the Steering Committee, and the World Health Organization. Primary data was collected through qualitative and quantitative methods, including desk reviews and semi-structured interviews.

32. A limited number of phone interviews with UN Environment staff and managers have been conducted to help orient the Evaluator and inform the development of both the Inception and Draft reports. Subsequent interviews during the data collection phase were primarily semi-structured, based on the evaluation matrix presented in Annex 2 of the inception report, and was conducted with project stakeholders including HQ staff, staff in PCVF and GAELP who work closely of Chemicals and waste issues (see annex 4 for the list of interviewees). These included: UN Environment Geneva, Paris and Nairobi office staff and managers, cooperating partners in other UN and non-UN institutions, national and local government administrations involved in project implementation (Ministries of the Environment), CSOs, NGOs, other Chemicals companies, bilateral organizations, regional and local institutions and research Centres and other key informants as relevant. Indeed the evaluator had the opportunity to sit on the November 2016 Program Advisory Group Meeting of GAELP to gain a better understanding of the issues involved with the Leaded Paint Partnership.

33. The evaluation focused on a manageable number of meaningful interviews. Interviews included:

- The UN Environment Project Manager and key persons in the project management team
- The UN Environment Fund Management Officer;
- UN Environment Chemicals & Waste Project Coordinator, Senior Programme Manager, Technology and Metals Partnership Team leader, and other relevant resource persons in the UN Environment Chemical and Waste Branch, and other substantive offices that have actively interacted with the project (e.g. Division of Communications and Public Information, Division of Environmental Law and Conventions, Regional Office for Asia and the Pacific, Regional Office for Latin America and the Caribbean, Regional Office for Africa);
- Selected representatives from among the project partners;
- Other relevant resource persons identified by the evaluator.

34. Field Visits were undertaken to the UN Environment Chemicals and Waste Branch office based in Geneva Switzerland and UN Environment Headquarters (HQ) in Nairobi, to allow for face-to-face meetings with members of the project team and Nairobi HQ as well as the National Project Coordination Office in Nairobi, Kenya. These visits enabled the Evaluator

to enhance his understanding of the strengths and weaknesses of the project with regards to country/local situation and context, and how beneficiaries and other key stakeholder especially perceive the project effectiveness, sustainability and impact. The field visits also helped the Evaluator to assess limitations and opportunities presented by implementation challenges, address cross-cutting issues (such as gender), and identify possible areas and means for programme improvements.

3 Evaluation Findings

3.1 Strategic relevance

35. This project was derived from and is consistent with UN Environment's strategy for dealing with Harmful Substances and Hazardous Waste which was itself based on UN Environment's earlier work in addressing the environmental dimension of the management of harmful substances and hazardous waste, including in particular, activities related to the chemical and waste related MEAs (the Montreal Protocol on Substances that Deplete the Ozone Layer, Kyoto Protocol and UNFCCC, the Basel Convention, the Rotterdam Convention and the Stockholm Convention).

36. Several documents prepared in support of the Programme of Work (PoW) of the C&W Sub-programme attempt to articulate a strategy for the Sub-programme. The 2008 draft Strategy of the Harmful Substances and Hazardous Waste Sub-programme for the PoW2010-11 articulated a vision for UN Environment "to be the leading global environmental authority for setting and providing the scientific, technical and policy agenda and responses related to the sound management of harmful substances and hazardous waste". The strategy further defined the scope of the Sub-programme, identified needs, challenges and drivers and stated UN Environment's comparative advantage and strategic priorities as well as the activities required to deliver the expected outputs and the stated results.

37. The project was designed to respond to several UN Environment Governing Council Decisions including (GC25/5 II) which requested UN Environment to finalize scientific reviews of lead and cadmium by taking into account the latest available information and to report its findings to GC 26 in February of 2011 with a view of informing discussions on the need for global action.

38. A key component of the project, the Partnership for Clean Fuels and Vehicles (PCFV) had earlier been launched at the World Summit on Sustainable Development in 2002 in Johannesburg with the aim of supporting developing countries to reduce air pollution through the phase-out of leaded gasoline.

39. This project is part of the follow-up to global efforts to deal with the problem of heavy metals in the Environment which saw the creation of a global convention on mercury.

40. In general the project was geographically focused on developing countries and countries with economies in transition where uses of lead and cadmium that had been phased out in industrialized countries continue. Regulations in these countries are not comprehensive and not well enforced where they exist. The consequence has been increased public health and environmental risks in countries that are least able to manage them. The importation of new and used products containing lead and cadmium such as

electronic equipment and batteries into those countries have continued to exacerbate the problem and represent a growing threat to public health and the environment in those countries.

41. The overall rating on strategic relevance is highly satisfactory.

3.2 Achievement of Outputs

42. Evaluation of the achievement of outputs and activities is based on the log frame and the reconstructed theory of change developed for this project. A review of the log frame clearly shows that all activities and outputs were necessary and appropriate, and formed a series of logical, sequential steps towards achievement of the project outcomes and objectives.

43. The evaluation found that besides the lack of delivery of a communication strategy, all the planned outputs were produced. However, many communication and information materials on lead and cadmium phase-out designed to raise public awareness, global support as well as regional and national action have been prepared and disseminated to project stakeholders globally.

Project Component	Planned Project Output	Indicators:	Actual Output	Remarks
Component 1	Project Output 1: Support provided to countries to phase out leaded petrol in the six remaining countries	(2010/11 and 2012/13) Number of countries that have been engaged on capacity building on need for phase out of leaded vehicle fuels (Target: 10 countries 2010- 2011); 6 Countries 2012- 2013)) and number of countries initiating implementation of the phase out plans (Target: 3 countries(2010-2011); 2 countries(2012-2013) and at least one international organisation addressing lead in fuels on a global level engaged) (2014-2015) Number of countries working on the PCFV, Baseline: 80 countries; Target: 83 countries.	At the 8th GPM of the PCFV held in Washington D.C, 21- 22 April 2010. Major outcomes: presented and discussed the performance of the 2008/09 PoW, proposed 2010/2011 PoW, Global Impact study and its preliminary results, vehicles work and strategic direction; and approval given for the 2010/2011 PoW, Global lead study results applauded and recommendation for a peer review made, the Vehicle Working Group was re- established with additional TOR and performance of the C-H commended by Partners. The GAELP made a presentation to Partners which was well received Tajikistan and Uzbekistan phased out leaded gasoline in the first 6 months of 2010. PCFV carried out a mission to Myanmar in July 2010 at the government's invitation where dialogue was established for the possibility of a national phase out program. Montenegro announced plans to phase out end 2010	In 2011, 6 months after the start of this project only 6 countries (Myanmar, Iraq Afghanistan, Algeria Yemen and N. Korea) still used small amounts of leaded fuel compared to 82 countries that were leaded in . 2002. Reports submitted to the partners confirmed leaded furl phase-out in the target countries.

Table 3: Planned Versus Actual Outputs

Project Component	Planned Project Output	Indicators:	Actual Output	Remarks
			A sub-regional meeting for North Africa on lead phase- out was held in Algeria on 16-17 November	
			Of the remaining refineries producing leaded petrol in Algeria and Iraq, the one in Algeria phased out production by 2016. At the time of drafting this report Algeria, Iraq and Yemen were the only countries that had not phased out leaded petrol completely	
Component 2	Project Output 2: Options identified for addressing and managing the elimination of lead paint	(2010/11 and 2012/13) Number of options identified for addressing and managing phase out of lead in paint agreed by the contributors of the Global Alliance to Eliminate Lead in Paint in accordance with its business plan. (reads as outcome indicator, project can commit up to identifying options, agreeing on them is not your responsibility. Keep it simple.)	1st meeting of GAELP. Initial organizational meeting of contributors, hosted in Geneva, Switzerland May 26- 28, 2010. Major outcomes: presented and discussed the background, overview and Framework of the Global Alliance; and developed work plans for the focal areas of work i.e. Health Aspects, Environmental Aspects, Legislation and Regulation, Outreach to Industry, and Workers Health	The action Plan identified options for addressing lead in paint.
		Target (2010/11): 1 area work plan drafted for each focal area of work of the Global Alliance i.e. health aspects, environmental aspects, legislation and regulation, outreach to industry and worker's health Target (2012/13): 1 updated area work plan drafted for each of the focal area of work of the Global Alliance and 1 GAELP business plan drafted. At least one guidance material published within the framework of the Global Alliance. (2014-2015) Number of options identified for addressing and managing phase out of lead in paint Baseline: 0 Target: One action plan for the Global Alliance drafted	Target 2: The Action Plan for the Lead Paint Alliance was finalized and endorsed by Advisory Group members. ICCM4 reached a decision on lead in paint in Oct 2015 by recognizing the work of the Alliance and focusing on the next steps forward to achieve the 2020 goal. In response to UNEA Resolution on Lead and Cadmium, the draft Action Plan was presented at UNEA 2 in 2016 Awareness raising activities for the International Lead Poisoning Prevention Week of Action with focus on Lead in Paint elimination were successfully implemented worldwide.	
Component 3	Project Output 3: Support provided to Governments	(2010/11 and 2012/13) Final documents on the trade flow of products	2010: Trade studies in AP and LAC was finalized and posted in the www.unep.org	All the outputs in this component were produced and either

Project Component	Planned Project Output	Indicators:	Actual Output	Remarks
	and industry to reduce risks to human health and the environment of lead and cadmium through the whole life cycle of those substances and to take action to promote the use of lead and cadmium-free alternatives, for instance in toys and paint N.B. Previous project outputs 3 and 4 from PoW 2010/11 have been merged into this project output for PoW 2012/13	containing lead, cadmium and mercury around the world available for discussions at the GC [Target: two studies carried out in two regions] Initiatives and policy development for reducing the risk of lead and cadmium at country level under implementation [Target: Two countries] Established scope, goals and clear milestones and targets for the partnership on lead and cadmium in cooperation with Governments, intergovernmental and non- governmental organizations and other stakeholders [Target: 1 work plan drafted and shared with stakeholders] Initiatives to demonstrate and replicate good practices for the global environmentally sound management of lead and cadmium batteries throughout their life are drafted [Target: 1 GEF project proposal drafted]. Options on reducing risks from lead and cadmium at the national, regional and global levels, included in the clearing-house mechanism of the secretariat of the Strategic Approach to International Chemicals Management (SAICM), [Target: 1 compiled document drafted and presented to the 3rd session of ICCM]	prior UN Environment GCs 26th regular session. Also, the final reviews of scientific information on lead and cadmium were available both on the unep.org website and for consideration of the UN Environment GC at its 26th regular session. Clear goals were established for the Lead in Paint Alliance. The Action Plan for the Lead Paint Alliance was finalized and endorsed by Advisory Group members. ICCM4 reached a decision on lead in paint in Oct 2015 by recognizing the work of the Alliance and focusing on the next steps forward to achieve the 2020 goal. In response to the UNEA Resolution on Lead and Cadmium, the draft Action Plan was presented at UNEA 2 in 2016 Several members of the Global Alliance (Governments, IGOs, NGOs & Industry) joined the Advisory Group.in 2015. GEF5 project on the elimination of lead paint in Africa was developed and implemented in 2014-2016. A "Global Report on the Status of Legal Limits on Lead in Paint," which was released in May 2016 by UN Environment describes the status of laws designed to regulate lead in paint in countries around the world. In 2016 the World Health Organization also launched an on-line map of regulations and controls on lead paint.	published or presented as Governing Council documents. A GEF project has indeed been prepared but through SAICM. Worksh0p reports are available.
		(2014-2015) Number of Governments supported to submit information on lead and cadmium to feed UNEA Resolution Baseline: 0 Target: 15 Number of regional workshops organised to build capacity building on lead paint (UNEA Resolution). Baseline: 0. Target: 1	An African workshop on the elimination of lead paint was held in Addis Ababa in December 2015, with the participation of 15 African countries. These countries agreed to work towards establishing legal limit to lead paint.	

Project Component	Planned Project Output	Indicators:	Actual Output	Remarks
Component 4	Project Output 4: Options identified for addressing and managing lead and cadmium for the attention of UN Environment's Governing Council N.B. Previous project outputs 3 and 4 from PoW 2010/11 have been merged into one project output for PoW 2012/13. Activities etc shown against output 3.	Informed discussions and consensus at UN Environment Governing Council in relation to the global actions required to reduce risks from lead and cadmium (Target: UN Environment GC26 meeting document on chemicals management addressing lead and cadmium and 2 final reviews of scientific information presented as INF doc)	Final reviews of scientific information on lead and cadmium were published in 2010. A draft decision on lead in paint taken at the Open- ended Working Group of the International Conference on Chemicals Management at its First meeting (Belgrade, 15 1318 November 2011) welcomed the establishment of the Global Alliance to Eliminate Lead Paint, acknowledged progress made to establish the Global Alliance and recognized that national initiatives to eliminate lead paint serve also as an example of a practical enabling demonstration of the Strategic Approach to International Chemicals Management (SAICM). Governments participating actively at the 26th regular session of the UN Environment GC acknowledged the work done by UN Environment on Lead and Cadmium, including the work of PCFV, and requested the Executive Director to continue working on the Lead and Cadmium activities, including GAELP, lead and cadmium batteries, the PCFV, among others (Ref. Decision 26/3: Chemicals and wastes management, Part I) During the UN Environmental Assembly in May 2016, UN Environment organized two events that provided government delegates the opportunity to learn about the health risks posed the exposure of children to lead in paint, and the need to establish laws to eliminate lead in paint in globally. A side event organized by UN Environment included a ministerial level presentation and dialogue, making the issue of lead in paint one of the most discussed topics at the meeting of the governing body	Governing Council Decisions were duly prepared and submitted to the Council. Council Decisions exist. There is evidence through project reporting that workshops were conducted.
Components 1-4	Project Output 5 : Communication,	Communications strategy for lead and cadmium		This evaluation is unaware of any

Project Component	Planned Project Output	Indicators:	Actual Output	Remarks
	information and reporting materials developed and disseminated to raise awareness and mobilize action on the environment and health risks of lead and cadmium. This output has been merged with outputs 1-3 for 2012/13	implemented at global, regional levels and in selected countries where lead phase out and cadmium phase out could raise national support in relation to project components 1-4		communication strategy prepared for this project. Many communication and information materials on lead and cadmium phase out designed to raise public awareness, global support as well as regional and national action have been prepared however and disseminated to project stakeholders globally.

Source: Information in this table has been assembled from PIMS reporting and the 2016 Project Activity Report

Support provided to countries to phase out leaded petrol in the six remaining countries

44. At the 8th GPM of the PCFV held in Washington D.C, 21-22 April 2010, the project presented and discussed the performance of the 2008/09 PoW, proposed 2010/2011 PoW, Global Impact study and its preliminary results and strategic direction. Approval was given for the 2010/2011 PoW. Global lead study results were applauded and recommendations were made for a peer review of the study. The Vehicle Working Group was re-established with additional Terms of Reference and performance of the Clearing-House commended by Partners

45. Tajikistan and Uzbekistan phased out leaded gasoline in the first 6 months of 2010. At the government's invitation, PCFV carried out a mission to Myanmar in July 2010 where dialogue was established for the possibility of a national phase out program. Montenegro announced plans to phase out leaded petrol at the end 2010

46. Of the remaining refineries producing leaded petrol in Algeria and Iraq, the one in Algeria phased out production by 2016. At the time of drafting this report Algeria, Iraq and Yemen were the only countries that had not phased out leaded petrol completely.

Options identified for addressing and managing the elimination of leaded paint

47. The first meeting of the Global Alliance for the Elimination of Lead in Paint (GAELP) of contributors was hosted in Geneva, Switzerland May 26-28, 2010. Key outcomes involved the presentation and discussion of the background, overview and framework of the Global Alliance and work plans for the focal areas of work i.e. Health Aspects, Environmental Aspects, Legislation and Regulation, Outreach to Industry, and Workers Health.

48. Trade studies in the Asian Pacific and Latin America and the Caribbean region were finalized and posted on the www.unep.org website prior to UN Environment GCs 26th regular session. Also, the final reviews of scientific information on lead and cadmium were available both on the unep.org website and for consideration of the UN Environment GC at its 26th regular session.

49. The Action Plan for the Lead Paint Alliance was finalized and endorsed by Advisory Group members. ICCM4 reached a decision on lead in paint in Oct 2015 by recognizing the work of the Alliance and focusing on the next steps forward to achieve the 2020 goal. In response to the UNEA Resolution on Lead and Cadmium, the draft Action Plan was presented at UNEA 2 in 2016

50. In 2015 the Advisory Group of the Global Alliance were reorganized to include representatives of Governments, IGOs, NGOs & Industry.

Support provided to Governments and industry to reduce risks to human health and the environment of lead and cadmium through the whole life cycle of those substances and to take action to promote the use of lead and cadmium-free alternatives, for instance in toys and paint

51. A project funded by the Global Environment Facility (GEF-5) and titled "Lead Paint Elimination Project in Africa" was designed to assist four countries (Cameroon, Cote d'Ivoire, Ethiopia and Tanzania) in working toward national legal limits to eliminate the manufacture, import, sale and use of decorative paints containing lead additives. The project facilitated collaboration between governments and NGOs, and developed strategies to replicate similar actions elsewhere in the African region and beyond. The project ran from 2014 to 2017, was implemented by UN Environment and executed by IPEN, a consortium of environmental NGOs⁷. In December 2015, UN Environment convened an East African regional workshop in Ethiopia in coordination with the GEF-5 project, where government officials from 15 African countries agreed to work towards the establishment of national laws to limit lead in paint.

52. UN Environment organized a follow-up East African workshop in Tanzania in September 2016 to assist the East African Community in working toward a harmonized regional standard for lead in paint. The workshop was co-sponsored by US EPA.

53. A Central and West African workshop was held in Cameroon in December 2016 including countries from the Economic Community of West African States. The 13 participating African countries also agreed to work towards establishing national laws to limit lead in paint. This workshop which was held as part of the GEF-5 project was co-sponsored by the Government of the Republic of Cameroon, UN Environment, IPEN and the US Environmental Protection Agency (US EPA).

54. In the Asia Pacific Region, a project funded by the European Commission was designed to assist seven Asian countries (Bangladesh, India, Indonesia, Nepal, Philippines, Sri Lanka and Thailand) in working toward national legal limits to eliminate the manufacture, import, sale and use of decorative paints containing lead additives. This project ran from 2012 to 2015, and was implemented by IPEN. Among other things, this project contributed to the promulgation of lead paint laws in India, Nepal, Philippines and Thailand, and the launch of a global Lead Safe Paint® Certification program. In April 2016, UN Environment held an inception workshop in China for a UN Environment project on "Promoting elimination of the use of lead paints in China and Africa."⁸

⁷ For more information, go to: <u>http://ipen.org/projects/africa-project-2014-2016</u>.

⁸ For more information, go to: <u>http://ipen.org/projects/asia-project-2012-2015</u>.

55. In May 2016, UN Environment convened a regional workshop in Moldova to assist countries in Central and Eastern Europe and Central Asia in developing national legal limits on lead in paint.

56. In Latin American and the Caribbean Region, UN Environment and the Pan American Health Organization sent letters to their counterparts in the Caribbean Community in October to alert them to the importance of establishing lead paint laws and to invite them to join the Lead Paint Alliance.

57. With regards to Technical Assistance Tools and Information for Government, the Lead Paint Alliance launched a web-based Regulatory Toolkit in September 2015 with the aim of assisting governments to establish national laws to limit lead in paint. The toolkit was a collaborative effort among Alliance partners and includes modules and case studies developed by UN Environment, WHO, US EPA, US CDC, IPEN, and the International Paint and Printing Ink Council (IPPIC). The toolkit which provides key information on approaches to developing laws to limit lead in paint was piloted in December 2015 during the East African workshop in Ethiopia. The toolkit is available on the Lead Paint Alliance website⁹.

58. A "Global Report on the Status of Legal Limits on Lead in Paint," which was released in May 2016 by UN Environment¹⁰ describes the status of laws designed to regulate lead in paint in countries around the world. In 2016 the World Health Organization also launched an on-line map of regulations and controls on lead paint¹¹.

59. To increase awareness of the health and environmental risks posed by lead in paint and to promote actions by governments and manufacturers to stop the production and sale of lead paints, the Lead Paint Alliance was featured in April 2015 during a Global Citizen Earth Day event in Washington, DC. At the event which was attended by thousands of people, UN Environment and the World Health Organization announced the goal of having laws in place worldwide by 2020 to eliminate lead in paint. Speakers stressed the health hazards of lead exposure, and the imperative for national governments to protect their citizens by eliminating lead in paint. In September 2015, UN Environment and US EPA co-hosted a highlevel side event on lead paint at the SAICM International Conference on Chemicals Management (ICCM4) meeting in Geneva. Speakers included senior officials from UN Environment, WHO, US EPA, United Nations Industrial Development Organization, Uruguay, IPEN, AkzoNobel and International Paint and Printing Ink Council (IPPIC). The side event effectively showcased the broad multi-stakeholder support for the goals of the Alliance, and it was well attended and well-received.

60. The International Lead Poisoning Prevention Week of Action, established within the framework of GAELP, took place from 20-26 Oct. 2013. Several global events were organized during the week. In Kenya, for example, a report on lead in enamel decorative paints was launched in Nairobi, an awareness creation workshop was organized by the Government of Kenya at Kirdi (23 Oct. 2013), and discussions were held with Basco Paint, the main paint manufacturer in Kenya to become a partner to the Global Alliance. The International Lead Poisoning week was closed with a graffiti event, hosted by the UN Environment Executive Director, the main attraction on the South to South Development Expo.

⁹ www.unep.org/chemicalsandwaste/noleadinpaint/toolkit

¹⁰ <u>http://unep.org/environmentalgovernance/Portals/8/documents/Limits-Lead-Paint-2016%20Report-</u> <u>Final.pdf</u>

¹¹ <u>http://www.who.int/gho/phe/chemical_safety/lead_paint_regulations/en/</u>

61. GAELP organized the second International Lead Poisoning Prevention Week¹² from 19-25 October 2014 with the goal of raising awareness worldwide about lead poisoning and encouraging action to eliminate the use of lead in paint. Awareness-raising events were hosted in more than 60 cities and 36 countries in conjunction with a global social media campaign. Activities held during the week included educational sessions, creation of awareness materials, presentations and speeches, art competitions, and media outreach.

62. In October 2015, events were organized in 87 cities in 39 countries during the third International Lead Poisoning Prevention Week. Activities included art competitions, statements of support and public demonstrations. Policy debates, workshops and scientific conferences were also organized¹³. In October 2016, more than 100 activities in 47 countries were organized for the fourth International Lead Poisoning Prevention Week. Activities included social media and press events, workshops and launches of new initiatives.¹⁴

Options identified for addressing and managing lead and cadmium for the attention of UN Environment's Governing Council

63. The 26th regular session of the UN Environment GC acknowledged the work done by UN Environment on Lead and Cadmium, including the work of PCFV, and requested the Executive Director to continue working on the Lead and Cadmium activities, including GAELP, lead and cadmium batteries, the PCFV, among others (Ref. Decision 26/3: Chemicals and wastes management, Part I)

64. In May 2016 during the UN Environmental Assembly, UN Environment organized two events that provided government delegates the opportunity to learn about the health risks posed the exposure of children to lead in paint, and the need to establish laws to eliminate lead in paint in globally. A side event organized by UN Environment included a ministerial level presentation and dialogue, making the issue of lead in paint one of the most discussed topics at the meeting of the governing body. The Acting Assistant Administrator for International and Tribal Affairs of the US EPA, spoke to environment ministers about the importance of eliminating lead in paint as part of the High Level Segment on Healthy Environment, Healthy People.

Communication, information and reporting materials developed and disseminated to raise awareness and mobilize action on the environment and health risks of lead and cadmium.

65. This evaluation is unaware of any communication strategy developed for lead and cadmium as part of the project outputs as indicated by a performance indicator. However, many communication and information materials on lead and cadmium phase out designed to raise public awareness, global support as well as regional and national action have been prepared and disseminated to project stakeholders globally.

66. The overall rating of the achievement of outputs is satisfactory

¹² http://www.who.int/ipcs/lead_campaign/report_2014.pdf

¹³ <u>http://www.who.int/ipcs/lead_campaign/Report_ILPPW2015_25Jan16.pdf?ua=1</u>

¹⁴ http://www.who.int/ipcs/lead_campaign/event_registration/en/
3.3 Effectiveness

3.3.1 Achievement of Direct Outcomes

67. The primary goal of the project was to reduce the anthropogenic uses of lead and cadmium in key products and industry sectors that give rise to particular exposure concerns. The approach involved a combination of policy and normative interventions including the assessment of the risk of exposure of lead and cadmium, awareness-raising on the adverse impacts of lead and cadmium on human health and the environment, development of partnerships (including governments, NGOs, the private sector) the development of regulatory regimes to eliminate leaded fuels, lead based paint and cadmium in batteries. The approach was expected to result in the reduction to the risk of exposure to lead and cadmium in developing countries and countries with economies in transition. This is because some uses of lead and cadmium that have been discontinued in industrialized countries are still prevalent in the less developed countries, regulations are less comprehensive and sometimes non-existent and enforcement and compliance less effective in developing regions.

68. Successful implementation of the project was expected to reduce anthropogenic uses of lead and cadmium in key products and industry sectors that give rise to particular exposure concerns. In the area of lead in fuels, action plans and phase-out of leaded fuel was expected to be completed in 10 countries where phase-out had not been achieved earlier. Also a partnership was expected to be forged with International Civil Aviation Organization to phase-out lead in aviation fuels. A Global Alliance was expected to be established to eliminate Lead Paint based on the PCFV and Global Mercury Partnership models and engaging other IGOs, governments, industry associations, civil society organizations, and academia. Guidelines were to be developed on appropriate regulatory and voluntary schemes for the elimination of leaded paint.

69. At the end of the first biennium (2010-2011) of project implementation, the Global Alliance to Eliminate Lead Paint had been established successfully. The first meeting of the Alliance was hosted in May 2011 and a draft work Plan was finalized for each area of the Global Alliance. In Collaboration with DCPI, communication documents had been drafted.

70. In the same biennium, a review of the scientific information on cadmium and lead had been finalized with particular emphasis on the data gaps that had been identified in previous Governing Council Decisions. In addition, studies on the possible side effects on human health and environment of the trade in products containing cadmium, lead and mercury in Latin America and the Caribbean, and Asia and Pacific region had been finalized. In response to UN Environment Governing Council decision 25/5 II, the scientific information and companion documents, were provided to UN Environment Governing Council for information to assist in its deliberations on the need for global action in relation to lead and cadmium. Activities planned were designed to be completed in time for the results to be included in the papers for GC26 in 2011. These Governing Council documents were prepared and a report submitted to the 26th session with a view to informing discussions on the need for global action in relation to lead and cadmium.

71. In approximately 6 years of project implementation, substantial progress on working with key partners and stakeholders for common approaches to lead and cadmium, including participation and endorsement of the Lead Paint Alliance work through ICCM4 and the sub-regional workshop had been made. The follow-up on Lead and Cadmium issues in relation to the compilation of information for UN Environment's Governing body (UNEA1 Resolution)

was achieved in the form of a draft compiled document. The Lead Paint Alliance successfully established a new Advisory Group and has since focused on short-term actions in line with the Business Plan. Interest of the international community increased both through the lead and cadmium work and the lead paint alliance work as a result of a United Nations Environment Assembly (UNEA1) Resolution which targeted lead and cadmium. The partnership for Cleaner Fuels and Vehicles (PCFV) has continued to bring partners together to work towards the global elimination of leaded petrol. The 10th PCFV global meeting was held in May 2014 in Paris.

72. In 2014-2015 the Global Alliance to Eliminate Lead Paint (GAELP) continued to work on international policy through the development of elements of legislation and regulation in relation to lead paint as well as the provision of technical advice through the hosting of the international week of action. New regulations and standards are being put in place in countries such as Cameroon, Thailand, Kenya, Nepal, Cambodia and Tanzania. The project is now moving towards a regional approach to the phase-out of lead in paint.

73. Leaded fuel phase-out has been achieved in all countries but Yemen, Algeria and Iraq. PCFV has continued discussions with Yemen and Myanmar for the support of technical activities, including the finalization of a SSFA with CEDARE that will include support to Yemen. In order to determine the impact of phase-out activities in Kenya, blood lead testing was carried out to compare results before and after leaded petrol phase out and a report, "The Impact of Phasing Out Leaded Petrol in Kenya", prepared to inform countries on the benefits of reducing the risk of exposure. The report concluded that mean Blood Lead Levels dropped by 38% from the pre-phase-out period with a decline of 46% in actual Blood Lead Levels. The study observed a significant shift in the distribution of Blood Lead Levels for post phase-out compared to pre phase-out levels with a decline of 75%. There was a significant reduction in Blood Lead levels in children and adolescents below the age of 18. The study carried out in Nairobi seven years after the leaded petrol phase-out is consistent with evidence from other parts of the world where leaded fuel had been phased-out.

74. Catalysed by activities of the project and to increase understanding of the economic impacts of childhood lead poisoning, the New York University School of Medicine, with support from the U.S. EPA, developed an on-line, interactive map displaying the impacts based on earlier reports. This map was launched and promoted extensively by the Alliance and its partners during the UN Environment Assembly in May 2016. In October 2016, International Persistent Organic Pollutants Elimination Network published its "Global Lead Paint Elimination Report," which provides an evaluation of progress being made toward the global elimination of lead paint. This report provides a useful summary of available country-specific data from studies that tested the lead content in new paints being sold in countries around the world.

75. In 2015 and 2016 four countries established new laws on lead in paint: India (2016), Kenya (2016), Nepal (2015), Thailand (2016). Four countries are known to have draft laws needing finalization: Bangladesh, Cambodia, Cameroon, Ethiopia, Honduras, and Tanzania.

Five countries, Sri Lanka, Philippines, Nepal, Thailand and India, passed new lead paint laws. Sri Lanka's law adopted in 2011(for residential and decorative paints) came into force on January 1, 2013. The Philippines adopted its lead paint regulation in 2013, which establishes a three-year phaseout period (2013-2016) for lead-containing architectural, decorative and household paints, and six-year phaseout period (2013-2019) for paints used in industrial applications. Nepal, Thailand and India adopted their respective lead paint regulations (for residential and decorative paints) in December 2014, January 2016 and April 2016, respectively.

76. Over the period covered by this evaluation, several other initiatives were catalyzed, through encouragement to industry to voluntarily stop the manufacture and sale of lead paint, focusing on residential and decorative paints containing lead additives in countries where legal limits are not currently in place. They include the following:

- The International Paint and Printing Ink Council (IPPIC) worked with paint manufacturing associations in Latin America to co-sponsor two workshops in Colombia in October 2016. These workshops encouraged the elimination of lead additives from paint through best industry practices.
- In April 2016, PPG Industries, a large multinational paint manufacturer based in the U.S., announced that the company will phase out the use of lead additives in its industrial paints by 2020. This action was catalysed by OK International's effort in Cameroon at Centre de Recherche et d'Education pour le Développement (CREPD)to influence PPG to remove led from it products by 2020. PPG had eliminated lead additives from its household paints several years ago.

77. The May 2016 UN Environmental Assembly provided the opportunity for government delegates to learn about the health risks to children of the exposure to leaded paint. In addition, delegates recognized the importance of establishing laws to eliminate lead in paint in countries worldwide. UN Environment organized a side event and a ministerial level presentation, which made the topic of lead in paint one of the most-discussed topics during this global meeting. A "Global Lead Paint Elimination Report," published by International Persistent Organic Pollutants Elimination Network in October last year provides a review of progress being made toward the elimination of lead paint globally. The report provides a useful summary of available country-specific data from studies that tested the lead content in new paints being sold in countries around the world. While it is clear that these activities were not substantively funded by the project being evaluated, they were essentially catalyzed by the creation of the partnership to eliminate lead in paint.

78. The overall rating of the achievement of outcomes is satisfactory

3.3.2 Likelihood of Impact

79. As stated above in section 1.6, Figure 1 presents the draft reconstructed Theory of Change of the project based on the actual results statements in the project document which have been "broken up" and re-arranged to better conform to UN Environment definitions of the different results levels and to show the theoretical cause-effect relationships. Results from the implementation of the project show that the project is making progress from results to impact. Indeed in some cases, it has been shown that the impact of the project can be determined.

Knowledge and Awareness

80. A direct outcome of the project which involved increased knowledge of the health risks of cadmium and lead was achieved through the production of communication and information materials on the public health and environmental impacts of leaded fuels and

lead in paint which was distributed widely to government officials, project stakeholders and the general public. UN Environment's study on trade in products containing cadmium, lead and mercury as well as other assessments on the heavy metals formed a basis for discussion on the chemicals agenda. The materials created knowledge which in turn promoted action among governments to develop legislation to form the basis for phasing out leaded fuels. Two previous evaluations of the PCFV (one conducted by UN Environment (2010) and the other by USAID (2011)) demonstrated clearly that a key component of the PCFV implementation strategy involving a modest resource investment to build capacity and awareness was instrumental in the success of the campaign to eliminate leaded fuels. For example, outreach materials which showed that elimination of leaded fuels would result in better engines, better cars, better with catalytic converters, better health changes and cost the same while working with both old and new cars was instrumental in changing attitudes towards the program. With respect to the Global Alliance, such a process is still on-going. A web-based Regulatory Toolkit was developed and launched in September 2015 by the Lead Paint Alliance to assist governments in establishing national laws to limit lead in paint. The toolkit was a collaborative project among Alliance partners, and features modules and case studies developed by UN Environment, WHO, US EPA, US Centres for Disease Control, IPEN, and the International Paint and Printing Ink Council (IPPIC).

Capacity Building

Simultaneously with creating knowledge and raising awareness the project 81. supported governments and industry through capacity building and the development of options for managing the problem of lead through several workshops such as the East African regional workshop in Ethiopia in December 2015 by UN Environment in coordination with the GEF-5 project, where government officials from the 11 participating African countries agreed to work towards the establishment of national laws to limit lead in paint. Another East African Workshop was organized in Tanzania towards harmonizing regional standard for lead in paint. The workshop was co-sponsored by US EPA. In December 2016, a Central and West African workshop was held in Cameroon, including countries from the Economic Community of West African States. The 15 participating African countries agreed to work towards establishing national laws to limit lead in paint. This workshop was coordinated as part of the GEF-5 project, and co-sponsored by UN Environment, International Persistent Organic Pollutants Elimination Network and the US Environmental Protection Agency (US EPA). Another regional workshop was held in Moldova in May 2016 by UN Environment to assist countries in Central and Eastern Europe. In April 2016, UN Environment held an inception workshop in China for a UN Environment project on "Promoting elimination of the use of lead paints in China and Africa.

Drivers and Assumptions

82. The key drivers were the partnerships (PCFV and GAELP) created which, were indeed set in motion early. Other drivers include support from governments, active engagement of stakeholders including civil society and the private sector and a strong coordination mechanism. For countries to transition to the sound management of cadmium and lead the project assumptions related to the availability of adequate human and financial resources to upscale policies on lead and cadmium as well as changes in consumer behaviour were realized through donor funding and awareness raising activities. PCFV was particularly successful in raising the needed resources to continue its campaign and, for the most part, phased out leaded fuel in the target countries. Progress has been slower in the Global Alliance as a result of the inability of the project to attract substantial funding. It would

seem that the regional approach being adopted will likely make the elimination of lead paint at the country level a much slower process.

83. With respect to long-term political will, the PCFV was very successful in getting the commitment of governments and industry to phase out the production and distribution of leaded gasoline. The project, at the time of this evaluation, was working with the International Civil Aviation Organization to help phase out lead in aviation fuel. The Global Alliance has successfully engaged many governments. The extent to which the engagements will lead to firm commitments on a large scale supported by national resources to eliminate lead paint is yet to be tested.

Impact

84. Several pre-phase-out and post-phase-out studies¹⁵ on the PCFV based on blood lead level testing have concluded that there have been quantifiable gains in the reduction of blood lead levels attributable to lead phase-out in fuels. In Kenya, blood lead levels reduced by 38%. The two studies reviewed (Ghana and Kenya) for this evaluation are consistent with results found in other parts of the world where phase-out had been achieved.

85. While the PCFV used a country-based approach to catalyse action among governments through national campaigns, the Global Alliance has opted for a regional model. While the approaches are similar (the use of legislation and standards, government and industry commitment) the required resources to drive the process has not materialized for the Global Alliance. This evaluator has been informed that a GEF Council in May 2017 approved a \$ 8.9 million project on SAICM of which \$ 3 million is dedicated to lead paint issues. Scientific assessments have been undertaken and public information materials prepared and disseminated to the relevant stakeholders, however, the required capacity has yet to be built at the country level with the necessary tools and methodologies for risk assessment which would lead to the appropriate national policies and control systems for countries to transition to the sound management of lead paint with a demonstrable impact on public health and the environment.

86. The overall rating of the likelihood of impact is satisfactory

3.4 Sustainability of Project Outcomes

87. Sustainability is understood to mean the extent to which outcomes and impacts derived from project implementation are likely to continue after external funding and assistance end. Factors and conditions affecting sustainability have been considered in four areas: socio-political factors, financial conditions, institutional conditions and environmental factors.

88. While the lead and cadmium project neither presented any explicit strategy to sustain results nor articulated an exit strategy, the project was designed with the aim of achieving permanent elimination of lead in fuels and paint as well as lead and cadmium in products.

¹⁵ a. Impact of Phasing Out leaded Petrol in Kenya.

b. Outcome and influence evaluation of the UNEP-based partnership for cleaner fuels and vehicles

The project was expected to reduce the uses of lead and cadmium in key products and industry sectors that expose people to lead and cadmium. Permanent elimination of exposure to lead and cadmium is a sustainable effort.

89. Besides the creation of knowledge and raising awareness the project supported governments and industry through capacity building and the development of options for managing the problem of lead and cadmium. In creating partnerships with high level support and specified commitment from concerned governments and participation of appropriate agencies the project has ensured that implementation and monitoring of activities can continue into the future

3.4.1 Socio-political factors

90. An essential component of socio-political sustainability relates to ownership by state and non-state actors. The project was focused on creating awareness and building capacity at the national level. Government agencies / institutions and industry are primary targets of the capacity building efforts. The strong partnership formed between private and public sector institutions with different agenda provides the driving force for action. Collaboration with high level political support from governments indeed provides a measure of sustainability because the political will is there to continue work towards the elimination of lead in fuels and lead and cadmium in products. Ownership, awareness and capacity built within government agencies and industry are likely to continue to shape attitudes and behaviours in the long term.

3.4.2 Financial conditions

91. The availability of financial resources was already discussed above as an assumption that is required to transform policy, plans, regulations and skills into action. While mobilization of financial resources has not been a major constraint to the PCFV in implementing its activities it nevertheless continues to be a bottleneck especially for the Global Partnership to Eliminate Lead Paint in implementing its activities and expanding the project to reach more governments. However, the development of a GEF project proposal through SAICM for financing the lead in paint initiative was advantage of validation by that financial mechanism.

3.4.3 Institutional Sustainability

92. This dimension of sustainability addresses the issue of the sustainability of results and onward progress towards impact relating to factors associated with processes, policies, national agreements, legal and regulatory frameworks and governance structures. All three direct outcomes discussed above under effectiveness (section 3.3) in this report have a direct bearing on this dimension of sustainability. As discussed in greater detail in the assessment of effectiveness, the building of global partnerships and the development of laws and standards were instrumental in developing institutional capacity which enabled governments to phase out leaded fuels. National laws and regulations were used to phase out leaded petrol in many countries. The Lead in Paint Alliance launched a web-based Regulatory Toolkit in September 2015 with the aim of assisting governments to establish national laws to limit lead in paint. Through workshops and information materials technical capacity was built in government agencies and in the private sector institutions and such capacities will likely remain in the various agencies into the future. With legal regimes in place and technical capacity built the results of the project are likely to be sustained in the long term.

3.4.4 Environmental Sustainability

93. This dimension addresses factors, positive or negative, that can influence the future flow of project benefits. It assesses project outputs or higher level results that are likely to affect the environment which, in turn, might affect sustainability of benefits. The phasing out of leaded petrol and the elimination of lead in paint, in and of itself, is an environmental benefit. The approach used can become a working model in the management of other heavy metals of concern globally. Indeed, all the project activities that created awareness, built capacity and reduced exposure to lead and cadmium are aimed at promoting environmental benefit. This evaluation did not observe any negative consequences on the environment from the implementation of project activities.

94. The overall rating of the likelihood of sustainability is satisfactory

3.4.5 Replication and up-scaling

95. The potential for replication and up-scaling of activities undertaken by the project exists. In particular, the partnership model used by the PCFV and now by the GAELP has being a successful model to bring together stakeholders including governments, civil society and the private sector around issues of common concern. High level support and specified commitments from participating governments at the outset have been used successfully in the PCFV and currently in the GAELP. The use of a Regulatory Toolkit developed with the aim of assisting governments to establish national laws to limit lead in paint was successfully used in implementing the PCFV and constitutes a replicable option in other similar projects. The toolkit was a collaborative effort among Alliance partners and includes modules and case studies developed by UN Environment, WHO, US EPA, US Centres for Disease Control, International Persistent Organic Pollutants Elimination Network (IPEN), and the International Paint and Printing Ink Council (IPPIC). The toolkit which provides key information on approaches to developing laws to limit lead in paint was piloted in December 2015 during the East African workshop in Ethiopia.

96. The rating of Replication and upscaling is satisfactory

97. Well-designed guidance and reporting schemes that address identified gaps and offer practicable solutions are replicable through their utility value and will be taken up¹⁶. Production and wide circulation of public awareness and information documents which document international best practices on the elimination of lead and cadmium to national organization which have the potential capacity to interpret and advocate for the issues effectively need to be replicated especially within the global Alliance since such approaches were effective in the PCFV.

3.5 Efficiency

98. Efficiency is a performance issue regarding the timeliness and cost-effectiveness of the implementation of planned activities and the delivery of outputs and outcomes. These could include positive contributions to performance such as: cost and time saving measures; use of existing systems to support project design/activity; and fullest use of

¹⁶ UNEP Evaluation of the Partnership for Cleaner Fuels and Vehicles 2010

human and financial inputs; as well as negative contributions to performance such as: administrative delays and management delays.

99. To a significant extent, the project built on tools and methodologies developed in previous biennia. For example, awareness-raising activities for countries to take decisions to minimize the risk of lead and cadmium continues to be a key element for the successful implementation of the Partnership for Clean Fuels and Vehicles (PCFV), Global Alliance to Eliminate Lead Paint (GAELP) and the support provided to governments and industry. This PCFV partnership predated the biennia covered by this evaluation. The use of partnerships contributed to both effectiveness and efficiency. The role of partnerships in project implementation is discussed in some detail in section 3.8 of this report.

The design of this project drew largely on the internal expertise of UN Environment 100. and external stakeholders to provide efficiency and effectiveness in execution. In general, efficiencies are either built into project design or have been realised through the use of proven models which allowed the project to roll-out activities to a wider stakeholder group sometimes through workshops and training programmes. For example the project organized several workshops in Africa (Kenya, Tanzania, and Cameroon) to discuss the problem of lead in paint and the development of standards and legislation. The project also took advantage of existing meetings to create awareness and get the regions involved. For example, in May 2016 during the UN Environmental Assembly, UN Environment organized two events that provided government delegates the opportunity to learn about the health risks posed the exposure of children to lead in paint, and the need to establish laws to eliminate lead in paint in globally. In September 2015, UN Environment and US EPA cohosted a high-level side event on lead paint at the SAICM International Conference on Chemicals Management (ICCM4) meeting in Geneva. Also, a Central and West African workshop was held in Cameroon in December 2016 including countries from the Economic Community of West African States. The 15 participating African countries also agreed to work towards establishing national laws to limit lead in paint. This workshop which was held as part of the GEF-5 project was co-sponsored by UN Environment, International Persistent Organic Pollutants Elimination Network and the US Environmental Protection Agency (US EPA). The close involvement of Regional Offices, in some cases, increased efficiency as project implementation benefited from their better regional knowledge, contacts and experience. For example, the international lead poisoning prevention week of action, established within the framework of GAELP, took place in October of 2013, 2015 and 2016. Some of the activities were supported by Regional Offices.

101. Inefficiencies involved slow project start-up¹⁷ for a variety of reasons including lateness in project approvals, administrative delays in access to systems, efficiency challenges in the level of support that professional officers have access to within the Chemicals Branch, that can lead to professionals having to undertake some of the administrative work themselves, delays in organising travels and insufficient funds to expand lead paint phase-out activities. Underlying some of these challenges was staff shortages, which might have been offset through, for example, increased cooperation with Regional Offices or more effective use of partnerships. These delays were common to the two biennia (2012-13, 2014-15). Funds may also be less of a limiting factor where resources can be amplified though increased use of partnerships. Strategies to overcome the challenges consisted of maintaining partner interest although funding delays also delayed Advisory Committee meetings. Other challenges involve reporting delays due to PIMS

¹⁷ Project was planned to start in July 2010. Actual start date was November 2010.

functionality and staff attention to reporting. Indeed, information obtained on this project through PIMS was scanty and could not have facilitated detailed assessment of the activities implemented. Attempts to improve efficiency involved flexibility in managing resources through rescheduling to mitigate funding challenges and organizing meetings and workshops back-to-back with other scheduled meetings. Perhaps better training on reporting in PIMS would improve data availability for monitoring, reporting and evaluation.

102. The overall rating of the efficiency is **satisfactory**

3.6 **Processes Affecting Project Performance**

3.6.1 **Project Preparation and Readiness**

Project design logic

103. The project was designed to deliver PoW outputs that contribute to achieving the Expected Accomplishments. An assessment of the initial design of the project was undertaken as a part of the inception report (see Annex 1). It helped to refine the questions and issues defined in the evaluation matrix and the Reconstructed Theory of Change (Figure 1) for the project by identifying causal links, assumptions and drivers. Key sources of information for project design quality assessment included the approved project document, the Project Review Committee (PRC) review sheet, the project logical framework.

104. The project was clearly drafted. It clearly described its relevance to Governing Council Decisions, the related medium term strategy and its programmes of work in section 3 of the project document. A key strength is the detailed analysis of various stakeholders expected to participate in project implementation. While the project was essentially a collection of on-going activities and relatively new initiatives, they seem to contribute to a common objective of countries transitioning to sound management of lead and cadmium. Good risk identification was undertaken and strategies to mitigate the risk to project implementation were presented. The project document identified critical success factors; however they were general in nature and not associated with each causal pathway. Assumptions were however clearly stated. Output targets were clearly stated but no dissemination strategies were presented.

105. With regards to the logframe, this evaluation notes that the project log-frame considers both PoW outputs and Expected Accomplishments (EAs) as project outcomes. In effect, project outcomes are set at a higher results level than the direct outcomes of the project which end up as intermediate states. This means that the direct project outcomes do not have indicators in the logframe to measure them. While this evaluation has not reconstructed those indicators, it will present evidence of the achievement of the direct outcomes of the project and not that of the subprogram to which it contributes. However, as presented, clear SMART indicators with targets were written at lower results levels. Project output indicators were mostly well formulated. However, they are mostly quantitative measures which do not usually assess the quality of support provided or the actual enhancement of capacities of stakeholders. In the case of the lead in fuels component, baseline studies were undertaken in selected countries making it possible to undertake an impact evaluation of the project.

Critical success factors and risks

106. For the most part, critical success factors have been identified and seemed to have been adequately considered. A Risk analysis table was included in the project document. Some critical risks related to the ability to mobilize the required resources to undertake the project was clearly identified as a high risk and measures stated to mobilize the resources. Efforts to mobilize these resources for some components of the project met with limited success in the current world financial environment. This is also a critical factor not only for the delivery of project outputs and outcomes but also for its sustainability.

3.6.2 Implementation Approach and Adaptive Management

107. The approach to project implementation while not discussed explicitly was described as two partnerships one modelled after an on-going successful partnership of the PCFV. In addition to UN partners, the PCFV was made up of the governments of the 12 countries where leaded fuel phase-out had not been achieved, the private sector, civil society, academia and the scientific community as well as the initial PCFV partners and donors.

108. The United Nations Environment Programme (UN Environment-Nairobi) served as its Clearing House and Secretariat. The Global Alliance to Eliminate Lead Paint was set up along similar lines and convened under the auspices of the UN with a Secretariat hosted jointly by UN Environment-Geneva and the World Health Organization. It is made up of diverse members or "partners" committed to taking actions to support the goals of the Alliance, including governments, intergovernmental organizations, non-governmental organizations (NGOs), private industry, academia and interested individuals.

109. The Secretariats administer the day-to-day operations of the partnerships. In the case of the PCFV, it performs roles such as supporting countries to prepare and implement cleaner fuel and vehicle strategies, organising meetings, responding to requests for support and information, and liaising with partners. The Secretariat also maintains an information database on its website of clean fuels and vehicles for all developing countries and countries with economies in transition.

110. Each of the Partnerships has an Advisory Group which is representative of the broad range of partners. It provides guidance on strategic and financial issues, as well as advice on general management of the Secretariats.

111. Regarding the internal organization of the Lead and Cadmium project, the project was managed by the Division of Technology Industry and Economics' transport and chemicals Units. The Transport Unit being responsible for continuing implementation of the Partnership for Clean Fuels and Vehicles while the Chemicals Unit had responsibility for the Lead in Paint initiative (the Global Alliance). The Regional Offices, ROA, ROAP and ROLAC played awareness raising roles in the respective regions of the activities of the partnerships. They also facilitated access to the various countries targeted for partnership activities. The Division of Communication and Pubic Information assisted in preparing public information materials targeting various stakeholder groups.

112. A key component of the Global Alliance now involves development of a legal framework document for adoption by the various partner governments however this was not provided for in the project. Therefore resources were not provided to develop such a

framework. Interviews with the Division of Environmental Law and Conventions showed dissatisfaction of that situation with the lack of provision of a role for legal work in the project for the DELC staff who have now been involved in the process.

113. The overall rating of Implementation Approach and Adaptive Management is satisfactory

3.6.3 Stakeholder Participation and Public Awareness

114. The project document presented a thorough identification and analysis of the various stakeholders in all four components of the project. The partners include governments, intergovernmental organizations (foundations, international Petroleum industry, International Civil Aviation Organization), non-governmental organizations, bi-lateral organizations, industry, the scientific community and ultimate beneficiaries¹⁸. The analysis defined roles of the various stakeholders by project component and defined challenges and opportunities. Indeed, competencies of the individual partners are clearly described in the project document. UN partners such as UN Habitat, WHO, ILO as well as internal UN Environment partners were clearly identified. For internal partners for example the project clearly noted that to conduct studies on the impact of lead and cadmium on human health and environment in Latin America and the Asia-pacific region DCPI the regional UN Environment Offices (ROLAC and ROAP) will play key roles. DCPI was to be responsible for information and awareness activities.

115. While there is evidence that the various partners may have been consulted during project design the nature of such consultation and involvement was not clearly documented in the project document. There is evidence however, that ultimate beneficiaries of the project were involved in some project components. For example, baseline studies were conducted on blood lead levels for the PCFV component and post lead phase-out studies were also conducted in selected countries. For the PCFV component, lead agencies that spearheaded project activities were established in partner countries.

116. The project has successfully engaged the category and number of stakeholders identified in the project document. A list of partners engaged is included in Annexes 2 and 3 for the PCFV and GAELP respectively. The Advisory group for the Global Alliance to Eliminate lead Paint was made up of governments, intergovernmental and nongovernmental organizations as well as industry and Academia (See annex 3). The PCFV continued to engage a similar private-public partnership of 120 partners (annex 2). Evaluations have shown that the PCFV is one of the most successful examples of such public-private partnerships with a broad range of diverse partners each of whom was able to make specific contributions to the alliance.

117. The overall rating of Stakeholder Participation is Highly Satisfactory

¹⁸ The category and list of project partner s in the Global Alliance to Eliminate Lead Paint are included as annex 3

3.6.4 Learning, Communication and Outreach

118. No specific knowledge management approaches were discussed in the project document. However, there is clear stakeholder analysis and partners and their roles at the country and global levels were clearly defined relative to UN Environment responsibilities. While there was no detailed discussion of communication channels of stakeholders, inherent in the roles description are pointers to how they will interact with various stakeholder groups. In some instances e.g. with regards to IPEN there was discussion of its role with NGOs across the Globe and its work with Toxic Link in a campaign to put children's health first and to eliminate lead in paint. The project results have shown while the channels of communication were not defined at the outset, the Advisory Group for the Global Alliance to Eliminate Lead Paint was quite successful in defining roles an of members in the partnership.

119. As shown in the project accomplishments above, a significant amount of effort went into public awareness activities related to the risk and adverse impact of lead and cadmium.

3.6.5 Country Ownership and Driven-ness

120. The issue of country ownership and driven-ness was addressed in the project document. The project, in component 1, targeted 10 to 12 countries where phase-out of gasoline had not been achieved in the on-going PCFV program. The countries included Afghanistan, Algeria, Bosnia-Herzegovina, Egypt, Montenegro, Myanmar, Serbia, Tajikistan, Uzbekistan and Yemen. The Partnership itself was made up of 120 entities (Annex 2) a substantial portion of which was made up of governments who had earlier committed to phasing out leaded gasoline in the various countries and promulgated legislation banning the leaded fuels and introducing cleaner fuels and vehicles.

Similar to the PCFV, the Global Alliance to Eliminate Lead Paint was set up as a 121. public-private Partnership made up of 69 (see annex 3) entities 15 of which are governments. At the time of this evaluation additional partners are joining the Alliance including governments. The project Advisory group was also made up of a diverse group of entities from governments, intergovernmental, non-governmental, to the private sector and academia. While the PCFV made rapid progress in adding members to the partnership because the added value of the partnership was clear, the same cannot be said of the Global Alliance. Indeed, unlike the PCFV, the Global Alliance seems to be leaning towards a regional approach. Individual countries that participated in the PCFV knew what benefits they could get from phase out of leaded fuel, however, the regional approach is likely to leave a lot of the initiative to governments and for that matter will result in slow progress towards the elimination of leaded paint. While the regional approach may be a starting point, successful elimination of lead in paint is likely to involve more intensive country level engagement to develop laws and standards as well as increase engagement of the private sector.

122. Country ownership of the project was also demonstrated through letters of commitment to participate and subsequent participation in the Alliance and its Advisory Group with clear indications of what the entity would contribute in terms of resources and/or expertise.

123. The rating for country ownership is satisfactory

3.6.6 Financial Planning and Management

124. The project's financial plan and a detailed budget (in UN Environment format) were presented in the Project Document. The resources in the budget came primarily from extrabudgetary sources. Approximately half of the approved project budget (\$6,485,426.00) was meant for PCFV implementation provided by US EPA in a Cooperative Agreement. Two formal project revisions were undertaken. The first revision was done in November 2012 and the second in August 2015. The planned extra-budgetary funding secured prior to 2015 was \$ 5,751,554.36.

125. The bulk of the budget for project implementation had been secured prior to the 2012-2013 biennium for a total of \$4,914,566. In the 20112-13 biennium \$833,442 was secured for a total of \$5,748, 008. These resources came in the form of donor support from the following institutions: For Component 1 (PCFV implementation) IPIECA; US EPA; FIA Foundation. Components 2 and 3 related to the Global Alliance the following institutions were the primary donors: Nordic Council of Ministers; Spain, Switzerland; the US; Sweden and Norway. The second revision to the budget in August was to introduce fund allocations from Norway, Switzerland, USEPA and a \$50,000 Environment Fund allocation for a total of \$737,418. The revisions to the budget were designed primarily to introduce the fund contribution, record expenditures, re-phase unspent balances and extend the project duration.

126. In general the planned funding target had been met and even slightly exceeded. However, resources for implementation of the Global Alliance have been inadequate. Indeed, it would seem that the level of ambition financially for that component of the project have been relatively low. The strategy used to raise funds included the following actions: identification of additional partners to support planned actions; raising awareness of partners common to PCFV and GEALP of the need to continue to address this risks of exposure to cadmium and lead; bilateral discussions and follow-up on previous agreements, discussions with governments and key stakeholders at international meetings and fundraising letters from the UN Environment Executive Director.

127. Financial reports were provided to key donors such as Switzerland, Spain and the United States, for their contributions. However, the information available to this evaluation did not reflect a routine annual reporting. The summary of financial status (table 4 below) did not reflect a clear breakdown of resources and sources of funds. No financial audits were undertaken for this project. Interviews with the FMO did not reveal any communication problems with the project team even though there was some indication of late receipts of some donor contributions.

Table 4: Summary of the financial status of the project at the time of project completion.

UMOJA		ID		: SE	3-000947	Project F	inancial	Status	- Rem	arks :
IMIS	N	lumber			:3B99	6485426-	Approved	project	budget	August
Funding	So	ource		: un	specified	2015			U U	Ū
Project	Implementatio	on	Status	: Co	ompleted					
Start	Date	:01	Ju	I	2010					
Planned	Duration	1	:66		Months					
Expected	Completion	Date	:31	Dec	2015	Reasons fo	or delay :			
(Last) Revis	ed Completion Da	ate :								
Total Appro	ved Budget (as p	er appro	val process	s) :		\$ 6,485,42	6.00			
Total Plann	ed XB Budget (as	per app	roval proces	ss):		\$ 6,485,42	6.00			

Finance Overview [Financial data as of 30 May 2015]

Co-Financing Total :	\$ 0.00
Total Secured Funds (annual expenditures + current allotment):	<mark>\$ 733,871.64</mark>
Total XB Funding Gap (planned XB budget - secured):	\$ 5,751,554.36
Total Expenditures:	\$ 697,086.98
Available Balance (secured - expenditures):	\$ 36,784.66

Project IMIS account & sub-account totals:

IMIS	Secured	Expenditures	Available balance
2E66	\$ 0.00	\$ 0.00	\$ 0.00
2E97	\$ 208,508.30	\$ 208,508.30	\$ 0.00
2E98	\$ 143,491.71	\$ 143,491.71	\$ 0.00
2H84	\$ 378,873.55	\$ 258,172.55	\$ 120,701.00
2H85	\$ 56,914.42	\$ 56,914.42	\$ 0.00
2K37	\$ 15,000.00	\$ 0.00	\$ 15,000.00
2K38	\$ 60,000.00	\$ 30,000.00	\$ 30,000.00

Programme Support, Communication and Evaluation estimates				
Co-Financing Total :				
Estimated Evaluation Cost:				
Estimated Programme Support Cost:	\$ 102,307.00			
Estimated Communication Cost:				

3.6.7 UN Environment Supervision and Backstopping

128. The project document was signed in UN Environment November 18 2010. Two project managers were responsible for implementing the various components of the project as they were designed as independent global initiatives with different but overlapping stakeholder groups. The project manager for the PCFV has remained at his post to continue and expand the PCFV initiative. However, the Global Alliance has experienced a change of Project Managers with the current project manager only at his post for a little over a year. The Project Managers provided direction and oversight as well as the required accountability for the use of resources and the delivery of output of the project. The Evaluation Consultant held face-to-face discussion with the two Project Managers in Geneva and Nairobi respectively and exchanged email messages during the conduct of this evaluation. Indeed, the Project Manager for the Global Alliance provided the opportunity for the evaluator to attend the meeting of the Advisory Committee in November 2016.

129. Earlier evaluations of the role of PCFV in the phase-out of leaded petrol in Sub Saharan Africa shows several key aspects, which contributed to its success. These included: a well- designed intervention which was well-focused on its objectives; comprehensive composition of the Partnership; ability to support multi-level processes; approach tailored to available finance; high quality management and staff. All the factors mentioned were indeed dependent on the competence of the project management staff who designed a well thought out intervention which was competently delivered. For the most part, the project management staff have stayed in place to continue delivery of the extended project. 130. The secretariat of the Global Alliance has already seen changes in project management. While that has not significantly affected the delivery of the project as planned, it would seem that momentum in the implementation of Alliance activities has been slow especially because there has not been a consistent push to mobilize resources to approach this global effort at the country level consistent with the approach used in the PCFV.

131. Reporting on the progress of project implementation had been done over the period covered by this evaluation in the Project Information Management System (PIMS). However what is lacking is the level of detail necessary for adequate reporting and evaluation of project implementation. Indeed, the evaluation of project delivery came mostly from sources other than PIMS. This is an area that requires management attention.

Gender

132. The project document is silent on gender equality issues in data collection/analysis and policy formulation. Children were often seen as primary victims of lead and cadmium exposure, yet very little discussion of the role of children and as potential actors in the projects is found in the project document. There was certainly a case for gender (and age) disaggregated bio-monitoring for the presence of lead and cadmium in humans but the project documents did not mention disaggregated bio-monitoring. The blood lead level studies undertaken in Kenya and Ghana however did some disaggregated reporting on children.

3.6.8 **Project monitoring &evaluation**

133. Elements of a monitoring plan were included in the project document. Milestones seem adequate for measuring implementation progress. However, PIMS reporting was grossly inadequate. A substantial portion of the information used in this report on the achievement of planned project outputs was derived from other sources (activity reports of the lead in Paint Partnership and interviews) than in PIMS, the primary source of information on project monitoring. Resources, allocated for reporting and evaluation were however inadequate for undertaking a field-based evaluation. Monitoring was not properly costed at project design. As a result of changes in project management and extensions to project duration, the final evaluation is being undertaken at a later date than was anticipated.

M & E Design

134. M & E design followed UNEP's standard monitoring and evaluation procedure. The original project log frame (or results framework) included objectively verifiable indicators and means of verification for the project objectives, outcomes and outputs. The project document described, for the output level, the M & E activities, responsible parties, and performance indicators. It also described monitoring and progress reporting at the project level (semi-annual progress reports. A terminal evaluation, financial reporting, timing and responsible parties were included in the M&E plan.. No funding was allocated to the monitoring of project activities however twenty thousand dollars was included as a separate budget line for evaluation.

135. As discussed in section in section 1.5 no significant changes were made at the results level. The changes were mainly a restatement of I within the subprogram framework for clarity at the expected accomplishment level. Previous project outputs 3 and 4 from PoW

2010/11 had been merged for PoW 2012/13. The use of the subprogram Expected Accomplishments in lieu of project objectives in the log frame makes reporting on the project objects quite challenging

136. The rating on M&E design and arrangements is moderately satisfactory,

Budgeting and funding for M&E activities

137. The project budget included the costs for M & E activities. The costed items were \$20,000 for evaluation. This funding was inadequate to allow for and detailed field study for this evaluation. No funds were allocated for the mid-term review and none was undertaken. Neither was any funding specifically allocated to monitoring,

138. The rating on budgeting and funding for M&E is Moderately Satisfactory.

M&E Implementation

139. As mentioned above, no significant changes were made to the results framework. Monitoring of project implementation was reported through the UN Environment's project reporting tool in the Project Information Management System (PIMS). This half yearly reporting was done in an automated data system. One activity report for 2016 was also made available to the evaluator. While PIMS reporting was duly done against the outcome and output indicators and milestones, information found in PIMS was not sufficiently detailed and helpful for evaluating the overall progress if the project. Financial reports were also submitted to the various governments that contributed resources to the project although the reports did not seem to have been prepared regularly.

140. The rating on M & E implementation is moderately unsatisfactory.

4.1 Conclusions

141. The project was designed to reduce risks to human health and the environment from lead and cadmium throughout their life-cycles, and to take action to promote the use (where appropriate) of lead and cadmium-free alternatives. It involved the raising of awareness of the risk of exposure to lead and cadmium in fuels and paint, and the development of options and action to reduce such risk of exposure. The project was successful in establishing in 2010-2011 the Global Alliance to Eliminate Lead Paint. The first meeting of the Alliance was hosted in May 2011 and a draft work Plan was finalized for each area of the Global Alliance. In Collaboration with DCPI, communication documents had been drafted.

142. In approximately 6 years of project implementation, progress on working with key partners and stakeholders for common approaches to lead and cadmium, including participation and endorsement of the Lead Paint Alliance work through ICCM4 and the sub-regional workshop was made. In 2014-2015 the Global Alliance to Eliminate Lead Paint (GAELP) continued to work on international policy through the development of elements of legislation and regulation in relation to lead paint.

143. While the Partnership for Clean Fuels and Vehicles (PCFV) was not established as a part of this project it has continued to bring partners together to work towards the global elimination of leaded petrol within the umbrella of the project. At the 10th PCFV global meeting in May 2014, the PCFV announced in Paris that leaded fuel phase-out has been achieved in all countries but Yemen, Algeria and Iraq.

144. The phase-out activities have already been shown to have positive impact on human health and the environment, A study on the "The Impact of Phasing Out Leaded Petrol in Kenya", which was carried out 7 years after the phase-out was initiated concluded that mean Blood Lead Levels dropped by 38% from the pre-phase-out period with a decline of 46% in actual Blood Lead Levels. There was a significant reduction in Blood Lead levels in children and adolescents below the age of 18.

145. The International Lead Poisoning Prevention Week of Action, established within the framework of GAELP, took place from 20-26 Oct. 2013. Several global events were organized during the week. In Kenya, for example, a report on lead in enamel decorative paints was launched in Nairobi, an awareness creation workshop was organized by the Government of Kenya at Kirdi (23 Oct. 2013), and discussions were held with Basco Paint, the main paint manufacturer in Kenya to become a partner to the Global Alliance. The International Lead Poisoning week was closed with a graffiti event, hosted by the UN Environment Executive Director, the main attraction on the South to South Development Expo.

146. GAELP organized the second International Lead Poisoning Prevention Week from 19-25 October 2014 with the goal of raising awareness worldwide about lead poisoning and encouraging action to eliminate the use of lead in paint. Awareness-raising events were hosted in more than 60 cities and 36 countries in conjunction with a global social media campaign. Activities held during the week included educational sessions, creation of awareness materials, presentations and speeches, art competitions, and media outreach..

147. One aspect of the project that has not seen any significant activity is work on cadmium. While studies had been completed on cadmium in products, alternatives, relevant

technologies etc. no significant activities were undertaken towards the management of the risk of exposure to cadmium and its environmental impacts. Indeed, it would seem that a clear strategy for the management of cadmium needs to be developed and perhaps on how to deal with heavy metals in general. Evidence relating to the implementation of the planned assessment of laboratory capacity on the analysis of compounds in the environment and in humans does not seem to exist. Indeed reporting on the project is silent on the activity.

148. While the resource mobilization targets were reached within the context of the project, the Lead in Paint component seems to be struggling financially post project and requires a significant infusion of resources to sustain and upscale campaign activities in target countries.

Overall Rating – satisfactory (S)

149. The summary of ratings for each criterion is presented in the below.

Table 5: Summary of ratings for each criterion in the terminal evaluation of the project

Criterion	Summary Assessment	Rating
Attainment of project objectives and results	The primary objective of reducing the risks to human health and the environment from lead and cadmium throughout their life- cycles, and to take action to promote the use (where appropriate) of lead and cadmium-free alternatives has been achieved to a large extent in the PCFV. Substantial progress has been made towards the elimination of lead in paint. Elimination of lead in paint is a longer term effort than the duration of this project. Indeed most of the planned results have been achieved. Very limited work has been done of cadmium.	S
Effectiveness	The Lead Paint Alliance successfully established a new Advisory Group and has since focused on short-term actions in line with the Business Plan. Interest of the international community increased both through the lead and cadmium work and the lead paint alliance work as a result of a United Nations Environment Assembly (UNEA1) Resolution which targeted lead and cadmium. The partnership for Cleaner Fuels and Vehicles (PCFV) has continued to bring partners together to work towards the global elimination of leaded petrol. Leaded fuel phase-out has been achieved in all countries but Yemen, Algeria and Iraq. PCFV has continued discussions with Yemen and Myanmar for the support of technical activities, including the finalization of a SSFA with CEDARE that will include support to Yemen. In order to determine the impact of phase-out activities in Kenya, blood lead testing was carried out to compare results before and after leaded petrol phase out and a report	S
Relevance	The project was derived from and is consistent with UN Environment's strategy for dealing with Harmful Substances and Hazardous Waste which was itself based on UN Environment's earlier work in addressing the environmental dimension of the management of harmful substances and hazardous waste, including in particular, activities related to the chemical and	HS

	waste related MEAs. The project was designed to respond to several UN Environment Governing Council Decisions including (GC25/5 II) which requested UN Environment to finalize scientific reviews of lead and cadmium by taking into account the latest available information and to report its findings to GC 26 in February of 2011 with a view of informing discussions on the need for global action. project was geographically focused on developing countries and countries with economies in transition where uses of lead and cadmium that had been phased out in industrialized countries continue. Regulations in these countries are not comprehensive and not well enforced where they exist	
Efficiency	In general, efficiencies are either built into project design or have been realised through the use of proven models which allowed the project to roll-out activities to a wider stakeholder sometimes through workshops and training programmes. The use of partnerships contributed to both effectiveness and efficiency. The role of partnerships. Design of the project drew largely on internal expertise. Inefficiencies involved slow project start-up19 for a variety of reasons including lateness in project approvals, administrative delays in access to systems, efficiency challenges in the level of support that professional officers have access to within the Chemicals Branch, that can lead to professionals having to undertake some of the administrative work themselves, delays in organising travels and insufficient funds	S
Sustainability of project outcomes		S
Sustainability of project outcomes Financial resources	Mobilization of financial resources has not been a major constraint to the PCFV in implementing its activities it nevertheless continues to be a bottleneck especially for further implementation of the Global Partnership for the Elimination of leaded paint in implementing its activities and expanding the project to reach more governments. While1 Financial reports were provided to key donors such as Switzerland, Spain and the United States, for their contributions, the information available to this evaluation did not reflect a routine annual reporting. No audits were undertaken for this project. Interviews with the FMO did not reveal any communication problems with the project team even though there was some indication of late receipts of some donor contributions.	S

¹⁹ Project was planned to start in July 2010. Actual start date was November 2010.

Institutional framework	The building of global partnerships and the development of laws and standards were instrumental in developing institutional capacity which enabled governments phase out leaded fuels. National laws and regulations were used to phase out leaded petrol in many countries. technical capacity was built in government agencies and in the private sector institutions and such capacities will likely remain in the various agencies into the future. With legal regimes in place and technical capacity built the results of the project are likely to be sustained in the long term.	S
Environmental sustainability	The phasing out of leaded petrol and the elimination of lead in paint in and of itself is an environmental benefit. The evaluation did not observe any negative consequences on the environment from the implementation of project activities.	S
Catalytic role (and replication)	The partnership model used by the PCFV and now by the GAELP has being a successful model to bring together stakeholders including governments, civil society and the private sector around issues of common concern. High level support at and specified commitments from participating governments at the outset have been used successfully in the PCFV and currently in the GAELP. The use of a Regulatory Toolkit developed with the aim of assisting governments to establish national laws to limit lead in pain was successfully used in implementing the PCFV and constitutes a replicable option in other similar projects.	S
Likelihood of Impact	Results from the implementation of the project show that the project is making progress along the pathway from results to impact. Indeed in some cases, it has been shown that the impact of the project can be determined and in some cases quantified. Increased knowledge of the health risks of cadmium and lead was achieved through the production of communication and information materials on the public health and environmental impacts of leaded fuels and lead in paint which was distributed widely to government officials, project stakeholders and the general public. UN Environment's study on trade in products containing cadmium, lead and mercury as well as other assessments on the heavy metals formed a basis for discussion on the global chemicals agenda. The materials created knowledge which in turn promoted action among governments to develop legislation to form the basis for phasing out leaded fuels. With respect to the Global Alliance, such a process is still ongoing Several pre-phase-out and post-phase-out studies based on blood lead level testing have concluded that there have been quantifiable gains in the reduction in blood lead levels reduced by 38%. Two studies reviewed for this evaluation are consistent with results found in other parts of the world where phase-out had been achieved	S
Stakeholder involvement	The project has successfully engaged the category and number of stakeholders identified in the project document. The Advisory group for the Global Alliance to Eliminate lead Paint was made up of governments, intergovernmental and nongovernmental	HS

	organizations as well as industry and Academia. The PCFV continued to engage a similar private-public partnership of 120 partners. Evaluations have shown that the PCFV is one of the most successful examples of such public-private partnerships with a broad range of diverse partners each of whom was able to make specific contributions to the alliance	
Country ownership/driven- ness	Country ownership of the project was also demonstrated through letters of commitment to participate and subsequent participation in the Alliance and its Advisory Group with clear indications of what the entity would contribute in terms of resources and/or expertise	S
Achievement of outputs and activities	The evaluation found that besides the delivery of a communication strategy, all the planned outputs were produced. However, many communication and information materials on lead and cadmium phase out designed to raise public awareness, global support as well as regional and national action have been prepared and disseminated to project stakeholders globally. There does not seem to exist any evidence on the implementation of the planned assessment of laboratory capacity on the analysis of compounds in the environment and in humans	S
Preparation and readiness	The project document was clearly drafted and objectives as well as results to be achieved clearly defined. Roles and responsibilities of various stakeholders well defined and the implementation approach reasonably well defined.	S
Implementation approach	The implementation approach, as outlined in the Project Document, was followed. The change in project manager for the GAELP may have slowed down momentum since the current project manager has multiple responsibilities. Also, it would seem that the regional approach being taken by the GAELP is as opposed to the country-based approach is likely to make country level implementation slower. The Partnership approaches used by the project have been a successful model for UN Environment and have been effective in this project.	S
Financial planning and management	The financing of the project was mostly from donors. While the targets for resource mobilization had been met, delays in receiving contributions in some cases meant the duration of the project had to be extended to continue implementation of project activities. It did seem also that the financial targets for the implementation of the GAELP were less ambitious and lack of resources makes progress a lot slower that it was the case in PCFV.	MS
Monitoring and Evaluation	The M & E design is according to the requirements of UN Environment. The logical framework has SMART indicators. M & E activities were conducted throughout the project. However, PIMS reporting was inadequate and other sources had to be used to supplement PIMS reporting on project accomplishments	MS

M & E Design	The M & E design satisfied the requirements of UN Environment. The use of the subprogram Expected Accomplishments in lieu of project objectives in the log frame makes reporting on the project objects quite challenging. Truth is they are not the same.	MS
M & E Implementation	PIMS reporting was duly done. However, information found in PIMS is inadequate for the purposes of evaluation.	MU
Budgeting and funding for M & E activities	The Project allocated funds for evaluation activities. However, the funds were not sufficient to undertake a more comprehensive field study for this evaluation.	MS
UN Environment supervision and backstopping	In general, UN Environment Supervision was adequate. However, reporting on project implementation in PIMS can be improved.	S

4.2 **Recommendations**

- i. Individual countries that participated in the PCFV knew what benefits they could get from phase out of leaded fuel; however, the regional approach to GAELP implementation is likely to leave a lot of the initiative to governments and, for that matter, will result in slow progress towards the elimination of leaded paint. While the regional approach may be a good starting point, successful elimination of lead in paint is likely to involve more intensive country level engagement to develop laws and standards as well as increase engagement of the private sector. This evaluation recommends that the Advisory Group should review and exhaustively discuss strengthened national level engagements.
- ii. A key component of the Global Alliance now involves development of a legal framework document for adoption by the various partner governments. However, this was not provided for in the project. Therefore, resources were not provided to develop such a framework. Interviews with the Division of Environmental Law and Conventions showed dissatisfaction with the situation where there was no provision for a role for legal work in the project. This evaluation recommends that in follow-up projects to this project, activities should be included and fully funded to provide support to governments and other stakeholders on legal regimes for the elimination of lead in paint to be implemented by the Division of Law and Conventions
- iii. While it is good business practice to tailor implementation approaches to available resources, it would seem that the regional approach proposed for the GAELP while taking advantage of regional trade collaboration, will also require aggressive engagement at the country level to promote resource mobilization. This evaluation recommends that the GAELP Advisory Group considers strengthened efforts for national approach level engagement as a way of committing governments to allocate national resources to this effort rather than wait for donor funding since it would seem as if the project is being imposed from outside.

- iv. In order to strengthen the Global Alliance for the Elimination of Lead in Paint, the following actions should be taken by UN Environment and WHO:
 - Approach companies at the level of the Executive Director of the UN Environment
 - Similarly invite paint raw materials suppliers to join the alliance
 - While there is the option to invite individual companies, the Alliance should consider working through industry Associations
 - Influential stakeholders groups such as professional from the health, consumer protection and children's health sectors should be invited to join the GAELP as a matter of priority
- v. Regarding cadmium, while an updated study has been done, the policy story has yet to be told. There is a clear need for follow-up to develop an approach to the management of the risk of exposure and its implications for human health and the environment. Indeed, it would seem that the UN Environment needs to develop a clear strategy for the management of cadmium and perhaps on how to deal with heavy metals in general.
- vi. This evaluation suggests that in future follow-up projects a clear distinction should be made between monitoring for adaptive project management and monitoring for reporting purposes and resources allocated to both to enable adequate data collection and reporting in the Project Information Management system.

4.3 Lessons Learned

150. Some of the lessons presented below had earlier been identified in the evaluation of the PCFV. They are still relevant especially because the PCFV is still a part of this project but most importantly, the on-going Global Alliance to Eliminate Lead in Paint has used a model similar to the global effort to eliminate leaded petrol.

- a) Financial resources for awareness-raising are a significant issue in global campaigns of this nature at the national, regional and global levels and can be a barrier to the phase-out process. In the PCFV while substantial cost estimates were made by governments for awareness raising campaigns the grants made were relatively small. Similarly, support to industry to refurbish refineries to produce high quality unleaded fuel was nominal. While this was the case, leaded fuel phase-out was achieved within a short time span. This implies that for some types of interventions, government commitment, regular follow-up and technical support can be just as important as large scale financing.
- b) Production and wide circulation of public awareness and information documents which document international best practices on the elimination of lead and cadmium to national organization which have the potential capacity to interpret and advocate for the issues effectively needs to be replicated especially within the Global Alliance since such approaches were effective in the PCFV.
- c) The Partnership approach is effective for interventions that involve voluntary action. Indeed, a multi-stakeholder alliance is likely to address several dimensions of an

intervention including: political commitment, technical support, financial support, and public awareness raising and industry best practice.

d) Well-designed guidance and reporting schemes that address identified gaps and offer practicable solutions are replicable through their utility value and will be taken up. Production and wide circulation of public awareness and information documents which document international best practices on the elimination of lead and cadmium to national organization which have the potential capacity to interpret and advocate for the issues effectively need to be replicated especially within the global Alliance since such approaches were effective in the PCFV.

Annexes

Annex 1. Assessment of project design quality

- 1. This template is intended for use during the inception phase of an evaluation or review. It supports an assessment of the initial design of a project. (For Terminal Evaluations/Reviews where a revised version of the project was approved based on a Mid-Term Evaluation/Review, then the revised project design forms the basis of this assessment). The purpose of this template is to stimulate thinking, based on a review of project design documentation that will strengthen: a) the development of useful and insightful evaluation questions and b) the development of a robust causal pathway, assumptions and drivers in the reconstructed Theory of Change. Where substantive and significant weaknesses are apparent at the project design stage, these may either be potential areas for further questioning, may have stimulated adaptive management or may have limited the overall effectiveness of the intervention.
- 2. Key sources of information for completing this assessment include the approved project document (ProDoc), the Project Review Committee (PRC) review sheet, the project logical framework or Theory of Change (TOC) at design stage and, where appropriate, a revised project design following a Mid-Term Evaluation/Review. (For GEF projects the GEFSEC reviews sheet and UN Environment response sheet should also be reviewed).
- 3. The ratings should be established across a six-point scale (see below) for each section and aggregated to determine an overall rating for the Quality of Project Design. Note that this score, combined with other information gathered during the data collection process, later informs the final evaluation rating under *Factors Affecting Project Performance: Preparation and Readiness.*

Α.	Project Context a	nd Complexity	YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Section Rating ²⁰ :	
1	Does the project face an	i) Ongoing/high likelihood of conflict?	No	Non identified		
	unusually challenging operational	ii) Ongoing/high likelihood of natural disaster?	No	Non identified		
	environment that is likely to negatively affect project performance?	lii) Ongoing/high likelihood of change in national government?	No	Political commitment was identified as high risk strategy for mitigation of that risk was identified	, however a d.	
В.	Project Preparatio	on	YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Section Rating:	
2	Does the project d adequate problem	locument entail a clear and n analysis?	yes	The problem of lead in vehicle fuels and and paint cadmium in the environment and on human health was clearly articulated		
3	Does the project d adequate situation	locument entail a clear and n analysis?	yes	Opportunities and constraints to project implementation were identified and documented in the project document		
4	4 Does the project document include a clear and adequate stakeholder analysis?		yes	The project document includes a sound and deta analysis. It discusses opportunities and challenge project components as it relates to stakeholders good description of partner competencies. It mo stakeholders that can provide input into the man problem of lead. Studies to determine human he were conducted meaning the populations that con negatively affected were identified.	iled stakeholder s of the various and provides a stly identifies agement of the ealth impacts build be	
5	If yes to Q4: Does the project document provide a description of stakeholder consultation during project design process? (If yes, were any key groups overlooked: government, private sector, civil society and those who will potentially be negatively affected)		yes	References to the battery industry which were or stakeholder analysis were included following PRC comment	nitted in the Creview and	

²⁰ Rating system for quality of project design and revision

A number rating 1-6 is used for each section: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1. The overall quality of the evaluation report is calculated by taking a weighted mean score of all rated quality criteria, see below. (For Project Context and Complexity, replace 'un/satisfactory' with 'un/likely'

6	Does the project document identify concerns with respect to human rights, including in relation to sustainable	Does the projecti)Sustainabledocument identifydevelopment in termsconcerns withof integratedrespect to humanapproach torights, including inhuman/naturalrelation tosystemssustainableii)Gender		There was no specific discussion of project sustainability in the project document. However, PRC indicated that Project sustainability was expected to be achieved through a governing body decision for sustained action on heavy metals The project sufficiently addressed the gender dimension with		
	development?			regards to reducing the risk to human health and from lead and cadmium	environment	
_		iii)Indigenous peoples	No			
C	Strategic Relevance		YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Section Rating:	
7	Is the project document clear in terms of its	i) UN Environment MTS, PoW and Sub- programme	Yes	The project clearly describes its relevance to the Council Decision and related medium term strate	Governing gy and its	
	relevance to:	ii) Regional, Sub-regional and National environmental issues and needs?	¥es	It describes the Regional and National context an section 2 of the project document	d focus in	
		iii) The relevant GEF focal areas, strategic priorities and operational programme(s)? (if appropriate)	No	No references were made to GEF focal area strate priorities perhaps because it is not a GEF funded a	egies and activity	
		iv) Key SDG ²¹ goals and targets		Project is consistent with SDG 7		
8	Does the project address key cross cutting issues?	i) South-South Cooperation (where appropriate)		No discussion of South-South Cooperation is evi	dent	
	Intended Decults and	ii) Bali Strategic Plan		No discussion of the Bali Strategic Plan is evident	Contion	
U	Intended Results and	Causanty	TES/NO	design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Rating:	
9	Is there a clearly pres Change?	ented Theory of	No			
10	 Are the causal pathways from project outputs (goods and services) through outcomes (changes in stakeholder behaviour) towards impacts (long term, collective change of state) clearly and convincingly described in either the lograme or the TOC? 			A logframe was included. However no narrative intervention logic was included in the project doc project itself is a collection of disparate sets of ac However they seem to be connected by the idea exposure to lead and cadmium. Indeed some of components had been ongoing long before the pr designed.	of the nument. The tivities. of reducing the project roject itself was	
11	Are impact drivers and assumptions clearly described for each key causal pathway?		yes	A section was included in the project document on critical factors. However they were general in nature and not associate with each causal pathway. Assumptions were however clearly stated in the project logframe and a section on Risk Analysis was also included in the project document		
12	2 Are the roles of key actors and stakeholders clearly described for each key causal pathway?		yes	The project document includes a sound and detailed stakeholder analysis. It discusses opportunities and challenges of the various project components as it relates to stakeholders and provides a good description of partner competencies. The roles are described in a generic way and not linked definitively to the key causal pathways		
13	Are the outcomes reatimeframe and scale	listic with respect to the of the intervention?	yes	Outcomes seemed realistic but for the most part support to governments was not clearly defined i document	the nature of n the project	
E	Logical Framework a	nd Monitoring	YES/NO	Comments/Implications for the evaluation design	Section Rating:	

²¹Depending on the date of project approval and type of intervention the MDGs (2015)or Aichi Biodiversity Targets (2020) may stand as alternatives to the SDGs (2030).

				(e.g. questions, TOC assumptions and drivers,	
1.4	Door tho	i) Capture the key elements of		methods and approaches, key respondents etc)	aothor
14	logical framework	the Theory of Change/ intervention logic for the project?	yes	The logical framework was reasonably well put to	gether
		ii)Have 'SMART' indicators for outputs?	yes	The indicators, for the most part were SMART. H some of the indicators were basically a restateme project outputs	owever the ent of the
		ii)Have 'SMART' indicators for outcomes?	yes	At the outcome level	
15	Is there basel key performa	ine information in relation to nce indicators?	Yes	In the lead fuel study blood lead levels were colle beginning of the project in selected countries. No indicated for other components however, project activities for the other components involve studie collection on lead in paint and lead & cadmium in	ected at the o baselines were t several es and data n products.
16	Has the desire been specifie outcomes?	ed level of achievement (targets) d for indicators of outputs and	Yes	Targets were set for the respective indicators	
17	Are the miles appropriate a and foster ma outcomes?	tones in the monitoring plan nd sufficient to track progress anagement towards outputs and	yes	The milestones seem adequate for tracking proje	ct progress
18	Have respons been made cl	ibilities for monitoring activities ear?	Yes	Responsibilities for monitoring were clear stated monitoring plan	in the
19	Has a budget project progr	been allocated for monitoring ess?	No	No specific budget was allocated for monitoring	
20	Is the workplan clear, adequate and realistic? (eg. Adequate time between capacity building and take up etc)		Yes	Work plan is set out very clearly and seemed to have been carefully thought through	
F	Governance a	and Supervision Arrangements	YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Section Rating:
21	Is the project model compr (Steering Com etc.)	governance and supervision ehensive, clear and appropriate? amittee, partner consultations	Yes	Project Governance and supervision model was c there was no narrative to explain how it was goin the diagram was quite clear	lear. While ng to operate,
22	Are roles and Environment	responsibilities within UN clearly defined?	Yes	Roles and responsibilities were reasonably clear	
G	Partnerships		YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Section Rating:
23	Have the capa adequately as	acities of partners been ssessed?	Yes	Capacities of partners were clearly articulated	
24	Are the roles partners prop to their capac	and responsibilities of external erly specified and appropriate ities?	Yes/No	Roles and responsibilities of external partners we clearly described.	re noted and
H	Learning, Cor	nmunication and Outreach	YES/NO	Comments/Implications for the evaluation design (e.g. questions, TOC assumptions and drivers, methods and approaches, key respondents etc)	Section Rating:
25	Does the proj knowledge m	ect have a clear and adequate anagement approach?	No	No Knowledge management approaches were dis	scussed
26	Has the proje methods for o stakeholders the plans buil communicatio by key stakeh	ct identified appropriate communication with key during the project life? If yes, do d on an analysis of existing on channels and networks used olders?	Yes/No	There is clearly stakeholder analysis an IPEN part roles at the country level roles were clearly defir Environment responsibilities. No detailed discuss communication channels of stakeholders was dis instances e.g IPEN there was discussion of	ners and their ned relative UN sion of cussed. In some
27	Are plans in p and lesson sh If yes, do they communication	lace for dissemination of results aring at the end of the project? I build on an analysis of existing on channels and networks?	No	While output targets are known, no specific disse strategies were articulated in the project docume	emination ent
I	Financial Plar	nning / Budgeting	YES/NO	Comments/Implications for the evaluation design (e.g. questions, TQC assumptions and drivers,	Section Rating:

			methods and approaches, key respondents etc)		
28	Are there any obvious deficiencies in the	No	Budget had not fully been secured for project cor	nponents at the	
	budgets / financial planning at design stage?		start of the project. However this was not clearly the project document	identified in	
	etc.)				
29	Is the resource mobilization strategy	No	No specific resource mobilization strategy has be	en articulated in	
	reasonable/realistic? (If it is over-ambitious it		the project document		
	outcomes or if under-ambitious may lead to				
	repeated no cost extensions)				
J	Efficiency	YES/NO	Comments/Implications for the evaluation	Section	
			design	Rating:	
			methods and approaches, key respondents etc)		
30	Has the project been appropriately	Yes/No	The initial project design did not take account of	time for	
	designed/adapted in relation to the duration		preparation and start up. At the end of the first k	piennium not	
31	and/or levels of secured funding?	Ves	much work had been accomplished	nd nartners It	
51	upon pre-existing institutions, agreements	yes	synergized with SIACM activities and partners and	d linked with on-	
	and partnerships, data sources, synergies and		going activities and partners from the lead in fuel	s program	
	complementarities with other initiatives,				
	project efficiency?				
32	Does the project document refer to any value	No	No value for money analysis was undertaken		
	for money strategies (ie increasing economy,				
22	efficiency and/or cost-effectiveness)?	Voc	Soveral revisions were done to extend duration	of the project in	
22	original end date? (If yes, explore the reasons	Tes	order to complete activities	of the project in	
	for delays and no-cost extensions during the				
	evaluation)	2150 (b) 0			
к	Risk identification and Social Safeguards	YES/NO	Comments/Implications for the evaluation design	Section Rating:	
			(e.g. questions, TOC assumptions and drivers,	noting.	
			methods and approaches, key respondents etc)		
34	Are risks appropriately identified in both the ToC/logic framework and the risk table? <i>(If</i>	yes	A risk analysis was undertaken and risk levels we the project document	ere identified in	
	no, include key assumptions in reconstructed				
	TOC)				
35	Are potentially negative environmental, economic and social impacts of the project	Yes/No	I discussion of socioeconomic contribution and poverty alleviation notential of the project was described. No perative		
	identified and is the mitigation strategy		environmental impacts of the project were described	ibed. Indeed	
	adequate? (consider unintended impacts)		the project itself was designed to contribute to the	ne protection of	
26	Does the project have adequate machanisms	Vac/Na	human health and the environment.	a protection of	
50	to reduce its negative environmental foot-	res/NO	human health and the environment. With regard	ls to project	
	print? (including in relation to project		management, no analysis or discussion of negative	/e	
	management)		environmental footprint was done.	6	
L	Sustainability / Replication and Catalytic	YES/NO	design	Section Rating:	
			(e.g. questions, TOC assumptions and drivers,		
			methods and approaches, key respondents etc)		
37	Was there a credible sustainability strategy at design stage?	No	No TOC was required and non was prepared. The identified key success factors and opportunities a	e project	
	acagnatuge:		itself stated assumptions and risks were identified	d	
38	Does the project design include an	No	There was no discussion of a strategy for disenga	gement	
20	appropriate exit strategy?	No			
39	promote/support scaling up, replication	NU	No surategies were prepared for scalling up		
	and/or catalytic action?				
40	Did the design address any/all of the	No	While some of that was implied with regards to t	e some of that was implied with regards to the kind of	
	tollowing: socio-political, financial, institutional and environmental sustainability		partners formed no specific discussion of the mea	asures of	
	issues?		sustainability was presented in the project docum	icht	
м	Identified Project Design Weaknesses/Gaps	YES/NO	Comments/Implications for the evaluation	Section	
			design	Rating:	
			(e.g. questions, TOC assumptions and arivers, methods and approaches, key respondents etc)		
41	Were there any major issues not flagged by	Yes	PRC raised issues of the inclusion of PCFV since th	ne project long	
1	PRC?		predated 53-P2. Total unsecured funding was No	t identified in	

		the project document Too many indicators to be reduced to key ones Related outcome statements to be combined	
42	What were the main issues raised by PRC that were not addressed?	PRC raised issues of the inclusion of PCFV since the project long predated 53-P2 – not addressed In component 1 it was not clear what the role of the Regional Office for Europe was with regards to European countries involved in the project;	

Annex 2: PCFV Partners

Governments:

Government of Australia - Environment Australia Government of Canada - Canadian International Development Agency Government of Canada - Environment Canada Government of Chile - Chile National Commission on the Environment (CONAMA) Government of China - China State Economic and Trade Commission Government of Democratic Republic of the Congo - Ministère de l'Environnement, Conservation de la Nature, Eaux et Forêts Government of Ecuador - Corpaire Government of European Community - European Parliament Government of Ghana - Ghana Environmental Protection Agency Government of Indonesia - Ministry of Environment Government of Israel - Ministry of Environment Government of Italy - Ministry of Environment and Territory Government of Kenya - National Environment Management Authority Government of Mexico - Instituto Nacional de Ecologia (INE) Government of Mexico - Office for Environment and Natural Resources (SEMARNAT) Government of Mozambique - Ministry for Coordination of Environmental Affairs Government of Netherlands - Ministry of Housing Government of Nigeria - Federal Ministry of Environment Government of Nigeria - Ministry of Industries Government of Somalia - Ministry of Environment and Disaster Management Government of South Africa - Department of Minerals and Energy Government of Thailand - Ministry Natural Resources and Environment Government of United States of America - Environmental Protection Agency (EPA) Government of United States of America - US Agency for International Development Government of United States of America - US Department of Energy Government of Yemen - Environment Protection Authority

Major Groups:

Institute of Environmental Studies (IES) (Albania) The LEAD Group (Australia) Assoc. of European Automobile Manufacturers (AECA) (Belgium) Association for Emission Control by Catalyst (Belgium) European Fuel Oxygenates Association (Belgium) Petrobras (Brazil) Pontifical Catholic University of Rio de Janeiro, Brasil - Mechanical Engineering Department (Brazil) Chandra Parkash (Canada) Clean Air Initiative - Asia (China) Forum For Environment (Ethiopia) Organisation Internationale des Constructeurs d'Automobiles (OICA) (France) Energy & Environmental Saving Ventures (EESAVE) (Ghana) KuKulKan Foundation (Guatemala) Centre for Science and Environment (CSE) (India) Society of Indian Automobile Manufacturers (India) Komite Penghapusan Bensin Bertimbel (KPBB) (Indonesia) Japan Automobile Manufacturer's Association (Japan) Japan Petroleum Energy Centre - JPEC (Japan) Environmental Liaison Centre International (Kenya) Institute of Petroleum Studies (Kenya) Petroleum Institute of East Africa (Kenya) Rupesh Kumar Sah (Nepal) TPG (Netherlands) Asian Clean Fuels Association (Singapore) National Association of Automobile Manufacturers of South Africa - NAAMSA (South Africa)

The Energy Institute of Uganda (EIU) (Uganda) FIA Foundation (United Kingdom of Great Britain and Northern Ireland) Int. Petroleum Ind. Envt Conservation Assn -IPIECA (United Kingdom of Great Britain and Northern Ireland) Tracerco (United Kingdom of Great Britain and Northern Ireland) Lawyer's Environmental Action Team (United Republic of Tanzania) Afton Chemicals (United States of America) Alliance of Automobile Manufacturers (United States of America) American Petroleum Institute (United States of America) Association of Intl. Automobile Manufacturers (United States of America) BP Products North America Inc. (United States of America) Blacksmith Institute (United States of America) Daedalus LLC (United States of America) Engine Manufacturers Association (United States of America) Environmental Defense (United States of America) Environmental and Energy Technology and Policy Institute (United States of America) Global Environment and Technology Foundation (United States of America) Honda (United States of America) International Fuel Quality Center (IFQC) (United States of America) International Truck and Engine (United States of America) Lubrizol Corporation (United States of America) Manufacturers of Emission Control Assoc (MECA) (United States of America) Michael P. Walsh (United States of America) Natural Resources Defense Council (United States of America) The Levon Group (United States of America) Trust For Lead Poisoning Prevention (United States of America) World Resources Institute (United States of America) Southern Centre for Energy and Environment (Zimbabwe)

UN System:

United Nations Environment Programme (UN Environment), Division of Policy Development and Law (DPDL) (Kenya) Pan American Health Organization (United States of America) United Nations Department of Economic and Social Affairs (UNDESA) (United States of America)

Other intergovernmental organizations:

Comisión Centroamericana de Ambiente y Desarrollo (El Salvador) Regional Environmental Center for Central and Eastern Europe - REC (Hungary) Clean Air Initiative Asia (Philippines) Association of Southeast Asian Nations (ASEAN) Working Group (Singapore)

Annex 3: GAELP Partners

Governments

- Canada
- Germany
- Honduras
- Israel
- Kenya
- o Kenya National Cleaner Production Centre (KNCPC)
- o Kenya Industrial Research and Development Institute (KIRDI)
- o Kenya Bureau of Standards (KEBS)
- Niger
- Paraguay
- Philippines
- Republic of Cameroon
- Republic of Moldova
- Switzerland
- Tanzania
- Thailand
- Uganda
- United States of America
- o U.S. Environmental Protection Agency (EPA)
- o U.S. Centers for Disease Control and Prevention (CDC)

Intergovernmental Organizations

- UN Environment, Economy Division, Chemicals and Waste Branch
- United Nations Industrial Development Organization
- WHO

Non Governmental Organizations*

- Architectural Association of Kenya (AAK)
- AGENDA for Environment and Responsible Development (AGENDA)
- APROMAC Environment Protection Association
- Armenian Women for Health and Healthy Environment (AWHHE)
- BaliFokus Foundation
- Centre for Environmental Justice (CEJ)
- Center for Public Health and Environmental Development (CEPHED)
- Centre de Recherche et d'Education pour le Développement (CREPD)
- Children's Environmental Health Foundation (CEHF)
- Eco Ethics Kenya (EEK)
- Ecological Waste Coalition of the Philippines, Inc. (EcoWaste Coalition)
- Environment and Social Development Organization (ESDO)
- Greenwomen
- Grupo GEA
- Health and Environment Alliance (HEAL)
- Inclusion Ghana
- IndyAct
- International Pediatric Association (IPA)
- International POPs Elimination Network (IPEN)
- Jeunes volontaires pour l'Environnement (JVE) Côte d'Ivoire
- Lata Medical Research Foundation
- LEADERS Nepal
- National Center for Healthy Housing (NCHH)
- Occupational Knowledge (OK) International
- Orissa State Volunteers and Social Workers Association (OSVSWA)
- Pollution Control Association of Liberia (POCAL)
- Pure Earth (formerly Blacksmith Institute)
- RightOnCanada
- Society for Advancement of Occupational and Environmental Health (SAOEH)

- The Just Environment Charitable Trust (Toxics Link)
- Toxisphera Environmental Health Association
- Uganda Network on Toxic Free Malaria Control (UNETMAC)

* Industry: Trade Associations and Companies

- ABRAFTI Associacao Brasileira dos Fabricantes de Tintas
- Asociación Nacional de Fabricantes de Pinturas y Tintas A.C. (ANAFAPYT, A.C.)
- AkzoNobel
- Australian Paint Manufacturers' Federation Inc. (APMF)
- British Coating Federation Ltd (BCF)
- Fendwall Paints and Chemical Products
- Federation Francaise des Industries des Peintures, Encres, Couleurs, Colles et Adhesifs,

Preservation du Bois (FIPEC)

- German Paint and Printing Ink Association (VdL)
- International Paint and Painting Ink Council (IPPIC)
- Jotun A/S
- Pacific Paint (Boysen) Philippines, Inc.
- Portuguese Paint Association (APT)
- Swiss Coatings Federation (VSLF)

Academics

- Dr Scott Clark (University of Cincinnati)
- Dr Paul Dargan (Medical Toxicology Office Guy's and St Thomas' NHS Foundation Trust)
- Indira Gandhi Government Medical College
- Loyola University Chicago Civitas ChildLaw Center
- University of Nairobi

Nairobi						
Sheila Aggarwal-Khan	QAS, UN Environment					
Maarten Kappelle	C&W Sub-programme Coordinator					
Arnold Kreilhuber	Programme Officer, DELC					
Rob De Jong	Programme Officer, PCFV					
Jane Akumu	Programme Officer, PCFV					
Farida Were	University of Nairobi					
Michael Spilsbury	Evaluation Office					
Pauline Marima	Evaluation Office					
Geneva						
Jacob Duer	Supervisor, SAICM Secretariat Team					
Sheila Logan	Programme Officer					
Juan Caicedo	Programme Officer, lead and cadmium					
Achim	Director, Chemicals Branch					
Joana Pemposki	WHO					
Advisory Group Meeting	UN Environment					
Ardeshir Zamani	Administrative Officer					
Brenda Koekkoek	a Koekkoek Programme Manager					
Esiaku Toda	Senior Programme Manager					

Annex 4 – Interview Lists

Annex 5: TERMS OF REFERENCE FOR THE EVALAUTION

Objective and Scope of the Evaluation

In line with the UN Environment Evaluation Policy22 and the UN Environment Programme Manual23, the Terminal Evaluation is undertaken at completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UN Environment and the main project partners (refer to section I. 4 above). Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation [especially for the continuation of UN Environments' activities in the area of lead and cadmium.

The evaluation should be able to provide insights around the following sets of key questions, based on the project's intended outcomes, which may be expanded by the consultant as deemed appropriate:

To what extent has the project contributed to an increased number of national/regional policies and control systems for implementing international obligations with regards to harmful chemicals and waste, and in particular the chemicals of concern i.e. lead and cadmium?

To what extent have the project activities, including support provided to government and industry, served to demonstrate and replicate good practices for global environmentally sound management of lead and cadmium at country level? Are there emerging evidence of reduced risks to human health and the environment from lead and cadmium that can be readily attributed to the project's initiative?

To what degree of success was the communication strategy for lead and cadmium implemented? How well have project achievements, information, and reporting materials been communicated at global/regional/national levels to raise awareness and mobilize action on the environmental and health risks of lead and cadmium?

In retrospect, how did revisions to the project's logical framework affect the intervention's likelihood to achieve its intended goal of reducing the anthropogenic uses of lead and cadmium in key products and industry sectors that give rise to particular exposure concerns?

What were the most effective coordination and management strategies used by the project, and what were the key drivers and assumptions required to influence the achievement of planned outcomes? What were the key challenges to project implementation and what remedies can be proposed to enhance the implementation of similar projects in the future?

Overall Approach and Methods

The Terminal Evaluation of the project will be conducted by an independent consultant under the overall responsibility and management of the UN Environment Evaluation Office in consultation with the UN Environment Project Manager24 and the Sub-programme Coordinator of the Chemicals and Waste Sub-programme25.

It will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used to determine project achievements against the expected outputs, outcomes and impacts. It is highly recommended that the consultant maintains close communication with the project team and promotes information exchange throughout the evaluation implementation phase in order to increase their (and other stakeholder) ownership of the evaluation findings.

The findings of the evaluation will be based on the following:

A desk review of:

²² http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx

²³ http://www.unep.org/QAS/Documents/UNEP_Programme_Manual_May_2013.pdf

²⁴ Eisaku Toda. Senior Programme Officer, UNEP Chemicals & Waste Branch.

²⁵ Maarten Kappelle. Coordinator, Sub-Programme Chemicals & Waste.

- Relevant background documentation, inter alia UN Environment Medium Term Strategy (2010-2013 and 2014-2017); UN Environment Programme of Work (2010-11, 2012-13, 2014-15); Progress Reports at Governing Councils and United Nations Environment Assembly;
- Workshop and training reports; relevant meeting minutes; publications and other outreach material; relevant background documentation; reports on project outputs and outcomes; policy documents; etc., related to PCFV, GAELP and other activities;
- Project design documents including Project Document and subsequent revisions, logical framework and budget, Annual Work Plans or equivalent;
- Project progress and terminal reports in PIMS
- Other reports such as financial reports, progress reports from collaborating partners, relevant correspondence, etc.;
- Previous evaluation report (<u>http://www.unep.org/transport/pcfv/PDF/leadphaseoutreport.pdf</u>)
- Interviews (individual or in group) with:
 - UN Environment Project Manager and key persons in the project management team
 - UN Environment Fund Management Officer;
 - UN Environment Chemicals & Waste Sub-programme Coordinator, Senior Programme Manager, Technology and Metals Partnership Team leader, and other relevant resource persons in the UN Environment Chemical and Waste Branch, and other substantive offices that have actively interacted with the project (e.g. DCPI, DELC, ROAP, ROLAC, ROA);
 - Selected representatives from among the project partners;
 - Other relevant resource persons identified by the evaluator.
- Surveys (e.g. use of questionnaires)
- Field visits if funds permit, the evaluation will include a visit to the UN Environment Chemicals and Waste Branch office based in Geneva Switzerland, to allow for face-to-face meetings with members of the project team;
- Other data collection tools to facilitate desk-based reviews.

Key Evaluation principles

Evaluation findings and judgements should be based on sound evidence and analysis, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from different sources) to the extent possible, and when verification was not possible, the single source will be mentioned. Analysis leading to evaluative judgements should always be clearly spelled out.

The evaluation will assess the project with respect to a minimum set of evaluation criteria grouped in five categories: (1) Strategic Relevance; (2) Attainment of objectives and planned result, which comprises the assessment of outputs achieved, effectiveness and likelihood of impact; (3) Sustainability and replication; (4) Efficiency; and (5) Factors and processes affecting project performance, including preparation and readiness, implementation and management, stakeholder participation and public awareness, country ownership and driven-ness, financial planning and management, UN Environment supervision and backstopping, and project monitoring and evaluation. The evaluation consultants can propose other evaluation criteria as deemed appropriate.

Ratings. All evaluation criteria will be rated on a six-point scale. Annex 3 provides guidance on how the different criteria should be rated and how ratings should be aggregated for the different evaluation criterion categories.

Baselines and counterfactuals. In attempting to attribute any outcomes and impacts to the project intervention, the evaluators should consider the difference between what has happened with, and what would have happened without, the project. This implies that there should be consideration of the baseline conditions, trends and counterfactuals in relation to the intended project outcomes and impacts. It also means that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project. Sometimes, adequate information on baseline conditions, trends or counterfactuals is lacking. In such cases this should be clearly highlighted by the evaluators, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.
The "Why?" Question. As this is a terminal evaluation and a similar intervention is planned for in the near future26, particular attention should be given to learning from the experience. Therefore, the "Why?" question should be at the front of the consultants' minds all through the evaluation exercise. This means that the consultants need to go beyond the assessment of "what" the project performance was, and make a serious effort to provide a deeper understanding of "why" the performance was as it was, i.e. of processes affecting attainment of project results (criteria under category F – see below). This should provide the basis for the lessons that can be drawn from the project. In fact, the usefulness of the evaluation will be determined to a large extent by the capacity of the consultants to explain "why things happened" as they happened and are likely to evolve in this or that direction, which goes well beyond the mere review of "where things stand" at the time of evaluation.

A key aim of the evaluation is to encourage reflection and learning by UN Environment staff and key project stakeholders. The consultant should consider how reflection and learning can be promoted, both through the evaluation process and in the communication of evaluation findings and key lessons.

Communicating evaluation results. Once the consultant has obtained evaluation findings, lessons and results, the Evaluation Office will share the findings and lessons with the key stakeholders. Evaluation results should be communicated to the key stakeholders in a brief and concise manner that encapsulates the evaluation exercise in its entirety. There may, however, be several intended audiences, each with different interests and preferences regarding the report. The Evaluation Manager will plan with the consultant which audiences to target and the easiest and clearest way to communicate the key evaluation findings and lessons to them. This may include some or all of the following; a webinar, conference calls with relevant stakeholders, the preparation of an evaluation brief or interactive presentation.

Evaluation criteria

Strategic relevance

The evaluation will assess, in retrospect, whether the project's objectives and implementation strategies were consistent with global, regional and national environmental issues and needs.

The evaluation will also assess the project's relevance in relation to UN Environment's mandate and its alignment with UN Environment's policies and strategies at the time of project approval. UN Environment's Medium Term Strategy (MTS) is a document that guides UN Environment's programme planning over a four-year period. It identifies UN Environment's thematic priorities, known as Subprogrammes (SP), and sets out the desired outcomes [known as Expected Accomplishments (EAs)] of the Sub-Programmes. The evaluation will assess whether the project makes a tangible/plausible contribution to any of the EAs specified in the MTS 2010-2013 and MTS 2014-2017. The magnitude and extent of any contributions and the causal linkages should be fully described.

The evaluation should assess the project's alignment / compliance with UN Environment's policies and strategies. The evaluation should provide a brief narrative of the following:

- Alignment with the Bali Strategic Plan 27. The outcomes and achievements of the project should be briefly discussed in relation to the objectives of the UN Environment Bali Strategic Plan.
- Gender balance. Ascertain to what extent project design, implementation and monitoring have taken into consideration: specific vulnerabilities of women and children to environmental degradation or disasters; and the role of women in mitigating or adapting to environmental changes and engaging in environmental protection.
- Human rights based approach (HRBA) and inclusion of indigenous peoples issues, needs and concerns. Ascertain to what extent the project has applied the UN Common Understanding on HRBA. Ascertain if the project is in line with the UN Declaration on the Rights of Indigenous People, and pursued the concept of free, prior and informed consent.

²⁶ A new project document is being developed to continue UNEPs' activities in the area of lead and cadmium, and it will take the outcome of this evaluation into consideration

²⁷ http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf

 South-South Cooperation. This is regarded as the exchange of resources, technology, and knowledge between developing countries. Briefly describe any aspects of the project that could be considered as examples of South-South Cooperation.

Based on an analysis of project stakeholders, the evaluation should assess the relevance of the project intervention to key stakeholder groups.

Achievement of Outputs

The evaluation will assess, for each component, the projects' success in producing the programmed outputs (products and services delivered by the project itself) and milestones as per the ProDocs and any modifications/revisions later on during project implementation, both in quantity and quality, as well as their usefulness and timeliness.

Briefly explain the reasons behind the success (or failure) of the project in producing its different outputs and meeting expected quality standards, cross-referencing as needed to more detailed explanations provided under Section F (which covers the processes affecting attainment of project results). Were key stakeholders appropriately involved in producing the programmed outputs?

Effectiveness: Attainment of Objectives and Planned Results

The evaluation will assess the extent to which the project's objectives were effectively achieved or are expected to be achieved.

The **Theory of Change (ToC)** of a project depicts the causal pathways from project outputs (goods and services delivered by the project) through outcomes (changes resulting from the use made by key stakeholders of project outputs) towards impact (long term changes in environmental benefits and living conditions). The ToC will also depict any intermediate changes required between project outcomes and impact, called 'intermediate states'. The ToC further defines the external factors that influence change along the major pathways; i.e. factors that affect whether one result can lead to the next. These external factors are either drivers (when the project has a certain level of control) or assumptions (when the project has no control). The ToC also clearly identifies the main stakeholders involved in the change processes.

The evaluation will reconstruct the ToC of the project based on a review of project documentation and stakeholder interviews. The evaluator will be expected to discuss the reconstructed TOC with the stakeholders during evaluation missions and/or interviews in order to ascertain the causal pathways identified and the validity of impact drivers and assumptions described in the TOC. This exercise will also enable the consultant to address some of the key evaluation questions and make adjustments to the TOC as appropriate (the ToC of the intervention may have been modified / adapted from the original design during project implementation).

The assessment of **effectiveness** will be structured in three sub-sections:

- I. Evaluation of the achievement of outcomes as defined in the reconstructed ToC. These are the first-level outcomes expected to be achieved as an immediate result of project outputs. For this project, the main question will be to what extent the project has contributed to governments and key partners increasingly working together and follow common approaches to lead and cadmium. Additional questions would be to what extent the project has: provided support to [remaining] countries to phase out leaded petrol; identified options for addressing and managing the elimination of lead paint; supported governments and industry to reduce risks to human health and the environment of lead and cadmium through and to use lead- and cadmium-free alternatives; and informed discussions and consensus at UN Environment Governing Council in relation to the global actions required to reduce risks from lead and cadmium; developed and disseminated information to raise awareness and mobilize action on the environment and health risks of lead and cadmium.
- II. Assessment of the likelihood of impact using a Review of Outcomes to Impacts (ROtI) approach28. The evaluation will assess to what extent the project has to date contributed, and is likely in the future to further contribute, to an increased number of intergovernmental, regional and national policy making processes that address the environmental, economic,

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Guidance material on Theory of Change and the ROtI approach is available from the Evaluation Office.

social and human health impacts of lead and cadmium, and the likelihood that those changes in turn to lead to sustained benefits to the environment and human well-being.

III. Evaluation of the achievement of the formal project overall objective, overall purpose, goals and component outcomes using the project's own results statements as presented in the Project Document29. This sub-section will refer back where applicable to the preceding sub-sections (a) and (b) to avoid repetition in the report. To measure achievement, the evaluation will use as much as appropriate the indicators for achievement proposed in the Logical Framework (Logframe) of the project, adding other relevant indicators as appropriate. Briefly explain what factors affected the project's success in achieving its objectives, cross-referencing as needed to more detailed explanations provided under Section F. Most commonly, the overall objective is a higher level result to which the project is intended to contribute. The section will describe the actual or likely contribution of the project to the objective.

The evaluation should, where possible, disaggregate outcomes and impacts for the key project stakeholders.

Sustainability and replication

Sustainability is understood as the probability of continued long-term project-derived results and impacts after the external project funding and assistance ends. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of benefits. Some of these factors might be direct results of the project while others will include contextual circumstances or developments that are not under control of the project but that may condition the sustainability of benefits. The evaluation should ascertain to what extent follow-up work has been initiated and how project results will be sustained and enhanced over time. The reconstructed ToC will assist in the evaluation of sustainability, as the drivers and assumptions required to achieve higher-level results are often similar to the factors affecting sustainability of these changes.

Four aspects of sustainability will be addressed:

Socio-political sustainability. Are there any social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Is the level of ownership by the main stakeholders sufficient to allow for the project results to be sustained? Are there sufficient government and other key stakeholder awareness, interests, commitment and incentives to back lead phase out and cadmium phase out? Did the project conduct 'succession planning' and implement this during the life of the project? Was capacity building conducted for key stakeholders? Did the intervention activities aim to promote (and did they promote) positive sustainable changes in attitudes, behaviours and power relations between the different stakeholders? To what extent has the integration of Gender Equality (GE) led to an increase in the likelihood of sustainability of project results?

Financial resources. To what extent are the continuation of project results and the eventual impact of the project dependent on financial resources? What is the likelihood that adequate financial resources30 will be or will become available to use capacities built by the project? Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?

Institutional framework. To what extent is the sustenance of the results and onward progress towards impact dependent on issues relating to institutional frameworks and governance? How robust are the institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustaining project results and to lead those to impact on human behaviour and environmental resources, goods or services?

Environmental sustainability. Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits? Are

²⁹ Or any subsequent **formally approved** revision of the project document or logical framework.

³⁰ Those resources can be from multiple sources, such as the national budget, public and private sectors, development assistance etc.

there any foreseeable negative environmental impacts that may occur as the project results are being up-scaled?

Catalytic role and replication. The catalytic role of UN Environment interventions is embodied in their approach of supporting the creation of an enabling environment and of investing in pilot activities which are innovative and showing how new approaches can work. UN Environment also aims to support activities that upscale new approaches to a national, regional or global level, with a view to achieve sustainable global environmental benefits. The evaluation will assess the catalytic role played by this project, namely to what extent the project has:

- catalyzed behavioural changes in terms of use and application, by the relevant stakeholders, of capacities developed;
- provided incentives (social, economic, market based, competencies etc.) to contribute to catalyzing changes in stakeholder behaviour;
- contributed to institutional changes, for instance institutional uptake of project-demonstrated practices or management approaches;
- o contributed to policy changes (on paper and in implementation of policy);
- contributed to sustained follow-on financing (catalytic financing) from Governments, private sector, donors etc.;
- created opportunities for particular individuals or institutions ("champions") to catalyze change (without which the project would not have achieved all of its results).

Replication is defined as lessons and experiences coming out of the project that are replicated (experiences are repeated and lessons applied in different geographic areas) or scaled up (experiences are repeated and lessons applied in the same geographic area but on a much larger scale and funded by other sources). The evaluation will assess the approach adopted by the project to promote replication effects and determine to what extent actual replication has already occurred, or is likely to occur in the near future. What are the factors that may influence replication and scaling up of project experiences and lessons?

Efficiency

The evaluation will assess the cost-effectiveness and timeliness of project execution. It will describe any cost- or time-saving measures put in place in attempting to bring the project as far as possible in achieving its results within its (severely constrained) secured budget and (extended) time. It will also analyse how delays, if any, have affected project execution, costs and effectiveness. Wherever possible, costs and time over results ratios of the project will be compared with that of other similar interventions.

The evaluation will give special attention to efforts by the project teams to make use of/build upon preexisting institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency. For instance, Global Alliance to Eliminate Lead Paint, Lead Paint Alliance, Partnership for Clean Fuels and Vehicles, the Global Initiative on Transport Emissions (GITE), Clean Air Initiative of the World Bank, the US EPA Clean Energy Initiative, among others

Factors and processes affecting project performance

Preparation and readiness. This criterion focusses on the quality of project design and preparation. Were project stakeholders 31 adequately identified and were they sufficiently involved in project development and ground truthing e.g. of proposed timeframe and budget? Were the project's objectives and components clear, practicable and feasible within its timeframe? Were the capacities of executing agencies properly considered when the project was designed? Was the project document clear and realistic to enable effective and efficient implementation? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation? Were counterpart resources (funding, staff, and facilities) and enabling legislation assured? Were adequate project management arrangements in place? Were lessons from other relevant projects properly incorporated in the project design? What factors influenced the quality-at-entry of the project design, choice of partners, allocation of financial resources etc.? Were any design

³¹ Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or 'stake' in the outcome of the project. The term also applies to those potentially adversely affected by the project.

weaknesses mentioned in the Project Review Committee minutes at the time of project approval adequately addressed?

Project implementation and management. This includes an analysis of implementation approaches used by the project, its management framework, the project's adaptation to changing conditions, the performance of the implementation arrangements and partnerships, relevance of changes in project design, and overall performance of project management. The evaluation will:

Ascertain to what extent the project implementation mechanisms outlined in the project document have been followed and were effective in delivering project milestones, outputs and outcomes. Were pertinent adaptations made to the approaches originally proposed?

Evaluate the effectiveness and efficiency of project management and how well the management was able to adapt to changes during the life of the project.

Assess the role and performance of the teams and working groups established and the project execution arrangements at all levels.

Assess the extent to which project management responded to direction and guidance provided by the UN Environment Project Manager and project steering bodies.

Identify operational and political / institutional problems and constraints that influenced the effective implementation of the project, and how the project tried to overcome these problems.

Stakeholder participation, cooperation and partnerships. The Evaluation will assess the effectiveness of mechanisms for information sharing and cooperation with other UN Environment projects and programmes, external stakeholders and partners. The term stakeholder should be considered in the broadest sense, encompassing both project partners and target users of project products. The TOC and stakeholder analysis should assist the evaluators in identifying the key stakeholders and their respective roles, capabilities and motivations in each step of the causal pathways from activities to achievement of outputs, outcomes and intermediate states towards impact.

The assessment will look at three related and often overlapping processes: (1) information dissemination to and between stakeholders, (2) consultation with and between stakeholders, and (3) active engagement of stakeholders in project decision making and activities. The evaluation will specifically assess:

- the approach(es) and mechanisms used to identify and engage stakeholders (within and outside UN Environment) in project design and at critical stages of project implementation.
 What were the strengths and weaknesses of these approaches with respect to the project's objectives and the stakeholders' motivations and capacities?
- How was the overall collaboration between different functional units of UN Environment involved in the project? What coordination mechanisms were in place? Were the incentives for internal collaboration in UN Environment adequate?
- Was the level of involvement of the Regional, Liaison and Out-posted Offices in project design, planning, decision-making and implementation of activities appropriate?
- Has the project made full use of opportunities for collaboration with other projects and programmes including opportunities not mentioned in the Project Document? Have complementarities been sought, synergies been optimized and duplications avoided?
- What was the achieved degree and effectiveness of collaboration and interactions between the various project partners and stakeholders during design and implementation of the project? This should be disaggregated for the main stakeholder groups identified in the inception report.
- To what extent has the project been able to take up opportunities for joint activities, pooling of resources and mutual learning with other organizations and networks? In particular, how useful are partnership mechanisms and initiatives (with Governments, intergovernmental and non-governmental organizations and other stakeholders) to build stronger coherence and collaboration between participating organisations?
- How did the relationship between the project and the collaborating partners (institutions and individual experts) develop? Which benefits stemmed from their involvement for project performance, for UN Environment and for the stakeholders and partners themselves? Do the results of the project (strategic programmes and plans, monitoring and management systems,

sub-regional agreements etc.) promote participation of stakeholders, including users, in environmental decision making?

Communication and public awareness. The evaluation will assess the effectiveness of any public awareness activities that were undertaken during the course of implementation of the project to communicate the project's objective, progress, outcomes and lessons. This should be disaggregated for the main stakeholder groups identified in the inception report. Did the project identify and make us of existing communication channels and networks used by key stakeholders? Did the project provide feedback channels?

Country ownership and driven-ness. The evaluation will assess the degree and effectiveness of involvement of government / public sector agencies in the project, in particular those involved in project execution and those participating in policy development and initiatives to demonstrate and replicate good practices for the sound management of lead and cadmium at country level:

- To what extent have Governments assumed responsibility for the project and provided adequate support to project execution, including the degree of cooperation received from the various public institutions involved in the project?
- How well did the project stimulate country ownership of project outputs and outcomes?

Financial planning and management. Evaluation of financial planning requires assessment of the quality and effectiveness of financial planning and control of financial resources throughout the project's lifetime. The assessment will look at actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co-financing. The evaluation will:

Verify the application of proper standards (clarity, transparency, audit etc.) and timeliness of financial planning, management and reporting to ensure that sufficient and timely financial resources were available to the project and its partners;

Assess other administrative processes such as recruitment of staff, procurement of goods and services (including consultants), preparation and negotiation of cooperation agreements etc. to the extent that these might have influenced project performance;

Present the extent to which co-financing has materialized as expected at project approval (see Table 1). Report country co-financing to the project overall, and to support project activities at the national level in particular. The evaluation will provide a breakdown of final actual costs and co-financing for the different project components (see tables in Annex 4).

Describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective. Leveraged resources are additional resources— beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector.

Analyse the effects on project performance of any irregularities in procurement, use of financial resources and human resource management, and the measures taken UN Environment to prevent such irregularities in the future. Determine whether the measures taken were adequate.

Supervision, guidance and technical backstopping. The purpose of supervision is to verify the quality and timeliness of project execution in terms of finances, administration and achievement of outputs and outcomes, in order to identify and recommend ways to deal with problems which arise during project execution. Such problems may be related to project management but may also involve technical/institutional substantive issues in which UN Environment has a major contribution to make.

The evaluator should assess the effectiveness of supervision, guidance and technical support provided by the different supervising/supporting bodies including:

- The adequacy of project supervision plans, inputs and processes;
- The realism and candour of project reporting and the emphasis given to outcome monitoring (results-based project management);

• How well did the different guidance and backstopping bodies play their role and how well did the guidance and backstopping mechanisms work? What were the strengths in guidance and backstopping and what were the limiting factors?

Monitoring and evaluation. The evaluation will include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project document. The evaluation will assess how information generated by the M&E system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensuring sustainability. M&E is assessed on three levels:

M&E Design. The evaluators should use the following questions to help assess the M&E design aspects:

- Arrangements for monitoring: Did the project have a sound M&E plan to monitor results and track progress towards achieving project objectives? Have the responsibilities for M&E activities been clearly defined? Were the data sources and data collection instruments appropriate? Was the time frame for various M&E activities specified? Was the frequency of various monitoring activities specified and adequate?
- How well was the project logical framework (original and possible updates) designed as a planning and monitoring instrument?
- SMART-ness of indicators: Are there specific indicators in the logframe for each of the project objectives? Are the indicators measurable, attainable (realistic) and relevant to the objectives? Are the indicators time-bound?
- Adequacy of baseline information: To what extent has baseline information on performance indicators been collected and presented in a clear manner? Was the methodology for the baseline data collection explicit and reliable? For instance, was there adequate baseline information on pre-existing accessible information on global and regional environmental status and trends, and on the costs and benefits of different policy options for the different target audiences? Was there sufficient information about the assessment capacity of collaborating institutions and experts etc. to determine their training and technical support needs?
- To what extent did the project engage key stakeholders in the design and implementation of monitoring? Which stakeholders (from groups identified in the inception report) were involved? If any stakeholders were excluded, what was the reason for this?
- Arrangements for evaluation: Have specific targets been specified for project outputs? Has the desired level of achievement been specified for all indicators of objectives and outcomes? Were there adequate provisions in the legal instruments binding project partners to fully collaborate in evaluations?

Budgeting and funding for M&E activities: Determine whether support for M&E was budgeted adequately and was funded in a timely fashion during implementation.

M&E Plan Implementation. The evaluation will verify that:

- The M&E system was operational and facilitated timely tracking of results and progress towards projects objectives throughout the project implementation period;
- Half-yearly Progress & quarterly Financial Reports were complete and accurate;
- The information provided by the M&E system was used during the project to improve project performance and to adapt to changing needs.

The Consultant

The evaluation will be undertaken by one independent Consultant. Details about the specific roles and responsibilities of the consultant are presented in Annex 1 of these TORs. The following expertise and experience is required: Over 15 years of professional experience, including evaluation of large, regional or global programmes and using a Theory of Change approach; an advanced university degree in environmental sciences or physical sciences; a broad understanding of large-scale, consultative assessment processes; broad understanding of harmful substance management,

pollution issues and management strategies; excellent analytical and report production skills, good command of English; attention to detail and respect for deadlines.

The Consultant will coordinate data collection and analysis, and the preparation of the main report for the evaluation. S/He will ensure that all evaluation criteria and questions are adequately covered.

By undersigning the service contract with UN Environment/UNON, the consultant certifies that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of the contract) with the project's executing or implementing units.

Evaluation Deliverables and Review Procedures

The evaluation team will prepare an inception report (see Annex 2(a) of TORs for Inception Report outline) containing a thorough review of the project context, project design quality; a draft reconstructed Theory of Change of the project, the evaluation framework and a tentative evaluation schedule.

It is expected that a large portion of the desk review will be conducted during the inception phase. It will be important to acquire a good understanding of the project context, design and process at this stage. The review of design quality will cover the following aspects (see Annex 7 for the detailed project design assessment matrix):

- Strategic relevance of the project
- Preparation and readiness;
- Financial planning;
- M&E design;
- Complementarity with UN Environment strategies and programmes;
- Sustainability considerations and measures planned to promote replication and up-scaling.

The inception report will present a draft, desk-based reconstructed Theory of Change of the project. It is vital to reconstruct the ToC before most of the data collection (review of progress reports, in-depth interviews, surveys etc.) is done, because the ToC will define which direct outcomes, drivers and assumptions of the project need to be assessed and measured – based on which indicators – to allow adequate data collection for the evaluation of project effectiveness, likelihood of impact and sustainability.

The inception report will also include a stakeholder analysis identifying key stakeholders, networks and channels of communication. This information should be gathered from the Project document and discussion with the project team. See annex 2 for template.

The evaluation framework will present in further detail the overall evaluation approach. It will specify for each evaluation question under the various criteria what the respective indicators and data sources will be. The evaluation framework should summarize the information available from project documentation against each of the main evaluation parameters. Any gaps in information should be identified and methods for additional data collection, verification and analysis should be specified. Evaluations/reviews of other large assessments can provide ideas about the most appropriate evaluation methods to be used.

Effective communication strategies help stakeholders understand the results and use the information for organisational learning and improvement. While the evaluation is expected to result in a comprehensive document, content is not always best shared in a long and detailed report; this is best presented in a synthesised form using any of a variety of creative and innovative methods. The evaluator is encouraged to make use of multimedia formats in the gathering of information e.g. video, photos, sound recordings. Together with the full report, the evaluator will be expected to produce a 2-page summary of key findings and lessons. A template for this has been provided in Annex 10.

The **inception report** will also present a tentative schedule for the overall evaluation process, including a draft programme for the country visit and tentative list of people/institutions to be interviewed. The inception report will be submitted for review and approval by the Evaluation Office before the any further data collection and analysis is undertaken.

The **main evaluation report** should be brief (no longer than 40 pages – excluding the executive summary and annexes), to the point and written in plain English. The report will follow the annotated

Table of Contents outlined in Annex 2. It must explain the purpose of the evaluation, exactly what was evaluated and the methods used (with their limitations). The report will present evidence-based and balanced findings, consequent conclusions, lessons and recommendations, which will be cross-referenced to each other. The report should be presented in a way that makes the information accessible and comprehensible. Any dissident views in response to evaluation findings will be appended in footnote or annex as appropriate. To avoid repetitions in the report, the authors will use numbered paragraphs and make cross-references where possible.

Review of the draft evaluation report. The evaluation team will submit a "zero draft" report to the UN Environment EO and revise the draft following the comments and suggestions made by the EO. Once a draft of adequate quality has been accepted, the EO will share this first draft report with the Project Manager, who will alert the EO in case the report would contain any blatant factual errors. The Evaluation Office will then forward the "first draft" report to the other project stakeholders (refer to Section I.4) for their review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. It is also very important that stakeholders provide feedback on the proposed recommendations and lessons. Comments would be expected within two weeks after the draft report has been shared. Any comments or responses to the draft report will be sent to the UN Environment EO for collation. The EO will provide the comments to the evaluation team for consideration in preparing the final draft report, along with its own views.

The evaluation team will submit the final draft report no later than 2 weeks after reception of stakeholder comments. The team will prepare a response to comments, listing those comments not or only partially accepted by them that could therefore not or only partially be accommodated in the final report. They will explain why those comments have not or only partially been accepted, providing evidence as required. This response to comments will be shared by the EO with the interested stakeholders to ensure full transparency.

Submission of the final evaluation report. The final report shall be submitted by Email to the Head of the Evaluation Office. The Evaluation Office will finalize the report and share it with the interested Divisions and Sub-programme Coordinators in UN Environment. The final evaluation report will be published on the UN Environment Evaluation Office web-site <u>www.unep.org/eou</u>.

As per usual practice, the UN Environment EO will prepare a quality assessment of the zero draft and final draft report, which is a tool for providing structured feedback to the evaluation consultants. The quality of the report will be assessed and rated against the criteria specified in Annex 3.

The UN Environment Evaluation Office will assess the ratings in the final evaluation report based on a careful review of the evidence collated by the evaluation consultants and the internal consistency of the report. Where there are differences of opinion between the evaluator and UN Environment Evaluation Office on project ratings, both viewpoints will be clearly presented in the final report. The UN Environment Evaluation Office ratings will be considered the final ratings for the project.

At the end of the evaluation process, the Evaluation Office will prepare a Recommendations Implementation Plan in the format of a table to be completed and updated at regular intervals by the Project Manager. After reception of the Recommendations Implementation Plan, the Project Manager is expected to complete it and return it to the EO within one month. He is expected to update the plan every six month until the end of the tracking period. As this is a Terminal Evaluation, the tracking period for implementation of recommendations will be 18 months, unless it is agreed to make this period shorter or longer as required for realistic implementation of all evaluation recommendations. Tracking points will be every six months after completion of the implementation plan.

Logistical arrangements

This Terminal Evaluation will be undertaken by one independent evaluation consultant contracted by the UN Environment Evaluation Office. The consultant will work under the overall responsibility of the UN Environment Evaluation Office and will consult with the EO on any procedural and methodological matters related to the evaluation. It is, however, the consultant's individual responsibility to arrange for his/her travel, visa, obtain documentary evidence, plan meetings with stakeholders, organize online surveys, and any other logistical matters related to the assignment. The UN Environment Project Manager and project team will, where possible, provide logistical support (introductions, meetings, site visits, etc.) allowing the consultant to conduct the evaluation as efficiently and independently as possible.

Schedule of the evaluation

Table 7 below presents the tentative schedule for the evaluation.

Table 7. Tentativ	e schedule for	the evaluation
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Milestone	Tentative timelines
Consultant recruitment and contracting process	July-August 2016
Inception and Kick off meetings	August 2016
Final Inception Report	August 2016
Evaluation Mission*	September 2016
Telephone interviews, online/electronic surveys etc.	September 2016
'Zero' draft report	October 2016
First Draft Report shared with UN Environment Project Manager	October 2016
[Revised] First Draft Report shared with project team	November 2016
Draft Report shared with external stakeholders	November 2016
Final Report and 2-page summary of key findings and lessons	November - December 2015

Annex 6: Response to Comments

Remarks	Response
While the report acknowledges specific countries that have regulations governing led content of paint it makes no mention of NGO partners that have been instrumental in encouraging governments to act	Lead Paint Elimination Project in Africa" was designed to assist four countries (Cameroon, Cote d'Ivoire, Ethiopia and Tanzania) in working toward national legal limits to eliminate the manufacture, import, sale and use of decorative paints containing lead additives. The project facilitated collaboration between governments and NGOs, and developed strategies to replicate similar actions elsewhere in the African region and beyond. The project ran from 2014 to 2017, was implemented by UN Environment and executed by IPEN, a consortium of environmental NGOs.
	In the Asia Pacific Region, a project funded by the European Commission was designed to assist seven Asian countries (Bangladesh, India, Indonesia, Nepal, Philippines, Sri Lanka and Thailand) in working toward national legal limits to eliminate the manufacture, import, sale and use of decorative paints containing lead additives. This project ran from 2012 to 2015, and was implemented by IPEN.
	The Lead Paint Alliance launched a web-based Regulatory Toolkit in September 2015 with the aim of assisting governments to establish national laws to limit lead in paint. The toolkit was a collaborative effort among Alliance partners and includes modules and case studies developed by UN Environment, WHO, US EPA, US CDC, IPEN, and the International Paint and Printing Ink Council (IPPIC). The toolkit which provides key information on approaches to developing laws to limit lead in paint was piloted in December 2015 during the East African workshop in Ethiopia. The toolkit is available on the Lead Paint Alliance website
	These are just some examples of references to NGO partners working to facilitate adoption of regulatory regimes mentioned in the report.
The report fails to mention the important work of IPEN on Lead Paint Certification.	This is now included.
The report does not mention efforts by NGOs in obtaining voluntary commitments by the paint industry	Over the period covered by this evaluation, several other initiatives were catalyzed, through encouragement to industry to voluntarily stop the manufacture and sale of lead paint, focusing on residential and decorative paints containing lead additives in countries where legal limits are not currently in place.

	They include the following:
	 The International Paint and Printing Ink Council (IPPIC) worked with paint manufacturing associations in Latin America to co-sponsor two workshops in Colombia in October 2016. These workshops encouraged the elimination of lead additives from paint through best industry practices. In April 2016, PPG Industries, a large multinational paint manufacturer based in the U.S., announced that the company will phase out the use of lead additives in its industrial paints by 2020. PPG had eliminated lead additives from its household paints several years ago. This is an example of a reference to efforts by an NGO to catalyze action in a Paint manufacturing Association. This is found in section 3.3.1 of the report. However, the report now includes specific reference to OK International's effort in Cameroun at CREPD to influence PPG to remove led from it products by 2020. It is found in section 3.3.1
The evaluation fails to mention the big discrepancy in in funding that went to efforts to eliminate lead in fuels from extremely small sums that have been devoted to programs to eliminate lead paint.	The document is replete with such references. Examples are presented below and can be found in sections 3.3.2. through to 3.5 While the PCFV used a country-based approach to catalyze action among governments through national campaigns, the Global Alliance has opted for a regional model. While the approaches are similar (the use of legislation and standards, government and industry commitment) the required resources to drive the process has not materialized for the Global Alliance. This evaluator has been informed that a GEF Council in May 2017 approved a \$ 8.9 million project on SAICM of which \$ 3 million is dedicated to lead paint issues The availability of financial resources was already discussed above as an assumption that is required to transform policy, plans, regulations and skills into action. While mobilization of financial resources has not been a major constraint to the PCFV in implementing its activities it nevertheless continues to be a bottleneck especially for the Global Partnership to Eliminate Lead Paint in implementing its activities and expanding the project to reach more governments. However, the development of a GEE project proposal through SAICM

for financing the lead in paint initiative was advantage of validation by that financial mechanism
of reasons including lateness in project start up for a valiety of reasons including lateness in project approvals, administrative delays in access to systems, efficiency challenges in the level of support that professional officers have access to within the Chemicals Branch, that can lead to professionals having to undertake some of the administrative work themselves, delays in organising travels and insufficient funds to expand lead paint phase-out activities. Underlying some of these challenges was staff shortages, which might have been offset through, for example, increased cooperation with Regional Offices or more effective use of partnerships. These delays were common to the two biennia (2012-13, 2014-15). Funds may also be less of a limiting factor where resources can be amplified though increased use of partnerships.

Annex I. Annex 7: A Brief Curriculum Vitae

With over 30 years of experience in the field of environment and development. Dr. Segbedzi Norgbey is currently CEO of the SDG International Ltd, a group of very seasoned national and international development professionals and academics headquartered in Accra, Ghana.

Dr Norgbey served as Chief of Evaluation in the United Nations Environment Program (UNEP) between November of 2001 and August 2013 where he developed, managed, and provided policy and strategic guidance in the implementation of UNEP's Evaluation Policy. He directed and managed the financial and human resources of the Evaluation Office and produced programmed outputs. Dr. Norgbey provided intellectual leadership and guidance to the Evaluation Office in developing Evaluation plans and conducting independent evaluations of UNEP's strategy, programmes and activities to determine their effectiveness and results. Prior to his appointment, he worked as Program Officer responsible for the processes associated with design methods and approval of UNEP projects. For over 12 years prior to joining UNEP he worked as an Environment Scientist on both State of Michigan and Federal hazardous substances and hazardous waste cleanup programs in the United States. For a period of 4 years, he worked on a USAID project as a training consultant for mid-management officials in Ghana to accept development responsibilities that would devolve from a decentralization program. Earlier in his career, Segbedzi worked on a World Bank financed research project to develop planning criteria for feeder roads in Ghana

Segbedzi graduated from the University of Science and Technology in Ghana with a Bachelor of Science (Hons) degree in Planning. He studied for a Master of Environmental Science degree at Dalhousie University in Canada between September of 1982 and August of 1984. He obtained a Ph.D. in Resource and Environmental Management from Michigan State University with special focus on pollution from agricultural chemicals and other hazardous substances. Segbedzi has authored and published numerous papers and reports.