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UNEP Global Mercury Partnership[1]

Draft Revised Business Plan of the Mercury Waste Management Partnership Area - July 2013 -

This Business Plan describes the activities of the Mercury Waste Management partnership area of the United Nations Environmental Programme (UNEP) Global Mercury Partnership. It serves as a planning and communication vehicle both for Partners and others.

The purpose of the business plan is to provide a framework for developing and implementing projects. The business plan is to serve as a resource for providing a common, cohesive structure for implementing the UNEP Global Mercury Partnership on Waste Management.

Through UNEP Governing Council Decision 24/3, UNEP is requested, working in consultation with Governments and other stakeholders, to strengthen the UNEP Global Mercury Partnership. The Government of Japan initiated this partnership area in early 2008 as a means of strengthening the UNEP Global Mercury Partnership on Waste Management.

The partnership is open for government and stakeholder participation. In UNEP Governing Council Decision 24/3 part IV paragraph 27, UNEP is tasked with working in consultation with Governments and stakeholders to strengthen the UNEP Global Mercury Partnerships. New activities and partners are encouraged within the UNEP Global Mercury Partnership.

[1] The UNEP Global Mercury Partnership is a *voluntary initiative* where government, non-government, public and private entities have agreed to work together to achieve the goal of the Partnership. For more information on the UNEP Global Mercury Partnership, please see Overarching Framework UNEP Global Mercury Partnership" available from http://www.unep.org/hazardoussubstances/LinkClick.aspx?fileticket=rsuIRqojHyc%3D&tabid=269&language=en-US

I. Summary of the Issue

Mercury waste[2] is not readily identifiable since waste consisting of elemental mercury, containing or contaminated with mercury enters the waste stream along with other municipal, medical, agricultural and industrial waste. Therefore, the mercury concentrations in most waste streams are directly related to the level of mercury in the products or materials.

This partnership aims to support the objectives of Overall Goal of Partnership; minimize and, where feasible, eliminate mercury releases to air, water, and land from waste containing mercury and mercury compounds by following a lifecycle management approach.

Lifecycle management (LCM) is a framework to analyse and manage the sustainability performance of goods and services (UNEP/SETAC 2009). When it is applied to waste management, in the narrow sense, lifecycle of waste management covers waste separation at source, collection, transportation, treatment and disposal, and in the broad sense, lifecycle of waste management covers material procurement, production, product use, and waste collection, transportation, treatment and disposal.

Efforts to reduce generation of mercury wastes will be realized through cooperation with the Mercury-containing Products Partnership Area and the promotion of environmentally sound storage will be realized through cooperation with the Supply/Storage Partnership Area.

The partnership area puts priorities in the following actions:

a. Identify and disseminate environmentally sound collection, transportation, treatment and disposal techniques/practices to reduce mercury releases from waste by following a lifecycle management approach;
b. Assess environmental impacts of current waste management practices and processes, including providing support to countries to assess their national situation (e.g. development of national mercury waste inventories and priority setting) and needs; and
c. Promote public awareness of the hazards regarding mercury waste and its management and support community engagement in the activities of the Waste Management Partnership.

II. Objective of the Partnership Area

The overall goal of the UNEP Global Mercury Partnership is to protect human health and the global environment from the release of mercury and its compounds by minimizing and, where feasible, ultimately eliminating global, anthropogenic mercury releases to air, water and land.

The objective of this waste partnership is:

- Minimize and, where feasible, eliminate mercury releases to air, water, and land from mercury waste by following a lifecycle management approach.

Part of the overall approach to achieve the objective above is to strengthen the capacity of all countries and stakeholders while focusing on the needs of developing countries and countries with economies in transition to effectively deal with mercury waste.

[2] Throughout this document "mercury waste" refers to waste consisting of elemental mercury and waste containing or contaminated with mercury

In order to achieve the objective, environmentally sound management of mercury wastes is needed in all aspects of the waste collection, transportation, treatment and disposal practices as well as in the reduction of atmospheric emissions of mercury from incineration and other industrial processes.

Public awareness raising, community engagement and training for workers exposed to mercury need to be included to reduce mercury exposures and releases Implementation of effective mercury waste treatment methods will be included as well.

III. Priority Actions

The partnership area has the following priority actions:

a. Identify and disseminate environmentally sound collection, transportation, treatment and disposal techniques/practices to reduce mercury releases from waste by following a lifecycle management approach, including:
    - Identify and characterize mercury contained in waste streams by taking into account contamination level and waste volumes.
    - Facilitate activities contributing to the finalization of "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury". Ensure coordination between Secretariat of the Basel Convention and its respective subsidiary bodies.
    - Prepare and promote utilization of "Good Practices for Management of Mercury Releases from Waste"
    - Implement national projects on environmentally sound management (ESM) of mercury waste that can be used as case studies/demonstration projects.
    - Ensure cooperation with the other relevant areas of the partnership such as products and supply/storage

b. Assess environmental impacts of current waste management practices and processes, including providing support to countries to assess their national situation (e.g. development of national mercury waste inventories and priority setting) and needs.

c. Promote public awareness of the hazards regarding mercury waste and its management and support community engagement in the activities of the Waste Management Partnership.

IV. Partner Efforts and Timelines

As shown in Figure 1, there are activities under the Waste Management Partnership Area at two levels. First, there are activities being implemented by the Waste Management Partnership Area as a whole, involving all Partners, which include the following:

a. Drafting of "Good Practices for Management of Mercury Releases from Waste"

b. Preparation of resource person list on mercury waste management

c. Utilization of mailing list among Partners and other interested parties

Second, there are projects on mercury waste management implemented by each Partner. In order to review and encourage all of these activities, the Partnership Area Meetings are organized periodically.

Note: Activities regarding development of the Good Practices for Management of Mercury Releases from Waste are currently suspended. Details will be determined upon the development of the Basel Technical Guidelines and upon consultations with the relevant groups.

Figure 1. Activities of the Waste Management Partnership

The partners are conducting various projects with regard to mercury waste management. Here, the projects have been classified by the type of wastes they deal with, as shown in the box below.[3]

Types of wastes addressed by the projects[4]:

1. Multiple Types of Mercury Wastes
2. Waste Products Containing Mercury (e.g. batteries, fluorescent lamps)
3. Healthcare Wastes (e.g. thermometers)
4. Mine Tailings [5]
5. Sites Contaminated with Mercury Wastes

For each project, (1) the priority action addressed by the project and (2) the stage of waste management addressed by the project are indicated. This information has been provided by the project contact persons. The list of priority actions and stages of waste management that the projects address are shown in the box below[6].

[3] Among the projects that deal with the same types of wastes, the projects that are already completed are listed first, followed by those that are on-going and under planning. Among the projects that deal with the same type of wastes and are at the same phase of implementation (i.e. completed, on-going or under planning), the projects that are implemented at the multilateral level are listed first, followed by those that are implemented at the bilateral, then the national, and then the local level.

[4] These types of wastes have been categorized based on the content of partner efforts submitted by Partners.

[5] Tailings are residue of raw material or waste separated out during the processing of crops or mineral ores (Reference: US EPA (1997) Terms of Environment: Glossary, Abbreviations and Acronyms. http://www.epa.gov/OCEPAterms/)

[6] This categorization has been conducted in response to the suggestions made in the Partnership Advisory Group Meeting held in March to April 2009 and in the Second Waste Management Partnership Area Meeting held in Tokyo, March 2010.

(1) Priority action addressed by the project
- a.1. Identification and characterization of mercury in waste streams
- a.2. Contribution to the finalization of Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury"
- a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects
- b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories)
- c. Promotion of awareness and education regarding mercury waste

(2) The stage of waste management addressed by the project
- a. Development of policy framework
- b. Reduction of mercury wastes (e.g. substitution of mercury-containing products)
- c. Collection/separation of mercury wastes
- d. Interim or short-term storage of collected mercury-containing products or wastes
- e. Recovery of mercury from mercury-containing products and byproducts
- f. Removal of mercury in flue gas and wastewater from waste management activities
- g. Stabilization and solidification of mercury wastes
- h. Final disposal of mercury wastes[7]
- i. Other

A. Activities Implemented by the Waste Management Partnership Area as a whole

Followings are on-going activities that are being implemented under the initiative of the Lead and the Ministry of the Environment, Japan and through consultation with the Partners.

Type of waste	Multiple Types of Mercury Wastes
Phase of project	☐ Completed ☒ On-going ☐ Under planning
Level of intervention	☒ Multilateral ☐ Bilateral ☐ National ☐ Local
Name of Project	**Development of a document titled "Good Practices for Management of Mercury Releases from Waste" (formerly called "Draft BAT/BEP Guidance on Reduction of Mercury Releases from Waste Management")[8]**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.2. Contribution to the finalization of "Draft Basel Convention Technical

[7] Final disposal of mercury waste may include options such as permanent storage of waste elemental mercury recovered from mercury waste or disposal of stabilized mercury waste in specially engineered landfill sites. Its definition may be discussed in the process of the intergovernmental negotiating committee to prepare a global legally binding instrument on mercury (INC).

[8] After consultation with the UNEP Chemicals and the Secretariat of the Basel Convention, the title of this document has been changed due to considerations to the Intergovernmental Negotiating Committee (INC) to prepare a globally legally binding instrument on mercury (started from June 2010). Given that the BAT/BEP can be discussed at the INC under its own context, the expression "BAT/BEP" should be deleted from the title of this document to avoid confusion between the INC process and the UNEP Global Partnership.

	Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury and Wastes Containing or Contaminated with Mercury" ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ b. Assessment of environmental impact of waste ,management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) <u>The stage of waste management addressed by the project</u> ☒ a. Development of policy framework ☒ b. Reduction of mercury wastes (e.g. substitution of mercury-containing products) ☒ c. Collection/separation of mercury wastes ☒ d. Interim storage of collected mercury-containing products ☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ f. Removal of mercury in flue gas and wastewater from waste management activities ☒ g. Stabilization and solidification of mercury wastes ☒ h. Final disposal of mercury wastes ☒ i. Other (please specify: remediation of contaminated sites)
Implementing agency, partners	UNEP Global Mercury Partnership, Japan (Ministry of the Environment) and other partners
Aim of the project	To provide information that supports the implementation of good practices contributing to the reduction of mercury releases from waste by following a lifecycle management approach. The document will be composed mainly of practical cases that are provided by Partners and that realise the principles of "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes containing or Contaminated with Mercury[9]" (to be determined).
Activities	The Lead will compile information about good practices to manage mercury releases from waste based on information and comments provided by Partners and relevant parties, taking into account consistency with "the Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury" (to be determined).
Achievements up to the present	The preliminary draft had been developed and was discussed at the Mercury Waste Management Partnership Area meeting in March 2010 (at that time called BAT/BEP Guidance). The first draft was presented as non-paper at INC 2 in January 2011. The document is expected to be updated as appropriate, based upon further inputs from Partners and for being more useful to the readers.
Budget	Funded by the Government of Japan
Project starting/ completion date	Started in June 2008; The first version was provided to INC 2 in January 2011. Completion date: to be determined
Contact information	Ministry of the Environment, Japan: Tel +81-3-5521-8260
Last updated on	22/05/2012

[9] "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury" and this document will work in a mutually complementary manner, avoiding overlaps in roles; the former will focus on "the principles of environmentally sound management of mercury waste" whereas the latter will provide information about "practical cases" that would assist readers to implement an important part of the "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury".

Other Activities

Preparation of Resource Person List on Mercury Waste Management

A Resource Person List on Mercury Waste Management has been prepared with the objectives to (1) provide a list of resource persons that the partners could contact when they wish to obtain advice from the technical standpoint in formulating or implementing projects to reduce mercury releases from waste management and (2) to provide a list of resource persons who could provide advice on the activities of the Waste Management Partnership Area such as organizing face-to-face meetings or drafting/revising "Good Practices for Management of Mercury Releases from Waste".

25 nominations have been received for the first version of the list; all of which have been approved by the Partners to be Resource Person. The completed list has been shared among the Partners through the mailing list and its summarized version has been made public through the UNEP Chemicals website. The first version of the list was revised, and the second version is available.

Utilization of Mailing List among Partners and Other Interested Parties

A mailing list is created under the Waste Management Partnership Area with the objectives to facilitate communication between the Partners and the Lead and also among the Partners and potential Partners. Those currently participating in the mailing list include representatives of the Partner organizations of the Waste Management Partnership Area, participants of the Waste Management Partnership Area Meetings and others interested in joining the mailing list and are nominated by someone of the above.

The mailing list is currently used principally for disseminating information from the Lead to the Partners and relevant parties regarding activities under the Waste Management Partnership such as those regarding "Good Practices for Management of Mercury Releases from Waste", the resource person list or the Business Plan. In the future, it is anticipated that the mailing list would be further utilized by the Partners and other relevant parties for purposes such as request for information regarding mercury waste management activities, reporting of activities, notification of events, etc.

B. Projects Implemented by Each Partner

1. Projects Implemented by Each Partner at a Glance (Detailed project information is followed by this table)

Type of waste addressed	Name of project	Phase of project	Level of inter-vention	Implementing agencies	pp.
1. Multiple Types of Mercury Wastes	Implementation of Basel Convention Technical Guidelines on Certain Wastes (other than "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury")	On-going	National	- Parties of the Basel Convention	11
1. Multiple Types of Mercury Wastes	Mercury Waste Management Project	Completed	Multi-lateral	- UNEP Chemicals - Governments of Burkina Faso, Cambodia, Pakistan,	12

Type of waste addressed	Name of project	Phase of project	Level of inter-vention	Implementing agencies	pp.
				Philippines, and Chile - Financial support from Government of Norway	
	"Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury"	Completed	Multi-lateral	- COP of the Basel Convention - With support from Japan serving as lead country and from the Secretariat of the Basel Convention (SBC)	13
	JICA Training Course "Hazardous Waste Management and Appropriate Disposal for Asia"	On-going	Multi-lateral	- Japan International Cooperation Agency, Japan Environmental Sanitation Center	14
	Sub-regional Capacity Building and Technical Assistance Project on Mercury Waste in Health and Other Sectors in Latin America and the Caribbean (LAC) Region	On-going	Multi-lateral1	- Secretariat of the Basel Convention (SBC) - Basel Convention Coordinating Centre (BCCC) in Uruguay - Governments of Argentina, Uruguay and Costa Rica	14
	Mercury Storage and Waste Project	On-going	Multi-lateral	- UNEP/Division of Technology, Industry and Economics (DTIE) Chemicals Branch in coordination with the Secretariat of the Basel Convention.	15
	Environmental Sound Management of Mercury Containing Wastes	Under Planning	National	- National bodies of Syria	16
	National Strategy for Elemental Mercury and Waste containing mercury ESM & temporary disposal area identification	Under Planning	National	- Health Secretary, National Environmental Agency - Alianza Contaminacion Cero - Ecologic, S.A.	17
	Mercury Management Toolkit	On-going	Local	- Global Environment Facility - Society of Environmental Toxicology and Chemistry, UNEP-DTIE	18
2. Waste Products Containing Mercury	Quantification and characterization of discarded batteries in Yaoundé, from the perspective of health, safety and environmental protection	Completed	Local	- Research and Education Center for Development (CREPD)	19
	Mercury Dental Amalgam Collection and Recovery in Massachusetts, USA	On-going	Local	- State of Massachusetts	19
	Mercury Dental Amalgam Collection and Recycling in	Completed	Local	- World Dental Federation - International Dental	20

Type of waste addressed	Name of project	Phase of project	Level of inter-vention	Implementing agencies	pp.
2. Waste Products Contain-ing Mercury	Victoria, Australia			Manufacturers	
	Get on with the Batteries: a Battery Collection Program (in Panama)	On-going	National	- Alianza Contaminación Cero Ecologic - S.A. Gabriela Batista Visual Artist - UNEP/ Regional office for Latin America and the Caribbean (PNUMA/ROLAC)	21
	Get on with compact fluorescent lamps (CFL)´s and Fluorescent Lighting: a Fluorescent Lighting Collection Program (in Panama)	On-going	National	- Zero Pollution Alliance - UNEP Regional Office - Ecologic, S.A.	22
	Quantification and Characterization of Hospital Wastes and Set up of the ESM Systems for Hospital Wastes in Cameroon	Under planning	National	- Research and Education Center for Development (CREPD) - Ministry of Public Health of Cameroon	23
	Awareness-raising and Educational project on collecting Mercury-added Lamps	On-going	National	- Association of Lighting and Mercury Recyclers	23
3. Health-care wastes	Revision of the Guideline "Safe Management of Wastes from Health Care Activities"	On-going	Multi-lateral	- World Health Organization Department of Health Security and Environment	25
	UNDP GEF Healthcare Waste Project (in Argentina, India, Latvia, Lebanon, Philippines, Senegal and Vietnam)	On-going	Multi-lateral	- Funding Agency: Global Environment Facility - Implementing Agency: United Nations Development Program - Principle Cooperating Agencies: World Health Organization and Health Care Without Harm	25
	Environmentally Sound Implementation of Healthcare Waste Management Plan in Nigeria	On-going	National	- Government of Nigeria	26
4. Mine tailings	Technical/Chemical and Economic Assessment of Mercury-containing and Hg-contaminated Tailings from the Mining Sector in Developing Countries	Completed	Multi-lateral	- UNEP Chemicals - Governments of Chile and Ghana - Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) as subcontractor	27

Type of waste addressed	Name of project	Phase of project	Level of inter-vention	Implementing agencies	pp.
	The Model Study in the Philippines for the Establishment of the Mercurial Environmental Pollution Improvement Program	Completed	Multi-lateral Local	- Department of Science and Technology, Philippines - Benguet Federation of small-scale miners - Department of Geology, University of the Philippines - Geological Survey of Denmark and Greenland - Japan Atomic Energy Agency	28
5. Sites Contaminated with Mercury Wastes	Peerless Green Initiative: Kodaikanal Mercury Thermometer Plant Pollution Assessment and Integrated Waste Management	On-going	Local	- Peerless Green Initiatives - EVIDENCE, India (NGO) - SDDIT, India (NGO) - Department of Forestry, India - Government of India, Eco-Tribunal - Anna University, Chennai (proposed) - National Atomic Laboratory, Hyderabad (proposed)	28
	Mercury Contamination of a Water-catchment at an at-risk Eco-sensitive Rainforest Inhabited by Disenfranchised Tribals Caused by Pollution from Mercury Thermometer Factory in Kodaikanal, Tamil Nadu, India	Under Planning	Local	- Peerless Green Initiatives - EVIDENCE, India (NGO) - SDDIT, India (NGO) - Department of Forestry, India - Government of India, Eco-Tribunal - Anna University, Chennai (proposed) - National Atomic Laboratory, Hyderabad (proposed)	29
	Upper Goulburn River Feral mercury recovery project	On-going	Local	- H.G.Recoveries Pty.Ltd	31
	Reduce exposure of mercury to human health and the environment by promoting sound chemical management in Mongolia	On-going	National Local	- UNIDO - Ministry of Nature and Green Development of Mongolia - Mine Reclamation Corporation (Mireco), Ministry of Health	32
	Preparatory project to facilitate the implementation of the legally binding instrument on mercury (Minamata Convention) in Argentina to protect health and the	Under Planning	National Local	- UNIDO - Associación Argentina de Médicos por el Medio Ambiente - Argentinean Society of	32

Type of waste addressed	Name of project	Phase of project	Level of inter-vention	Implementing agencies	pp.
	environment			Doctors for the Environment (AAMMA)	
	Liddell's Calcined Sands stockpile site Bendigo, Victoria, Australia	Completed	Local	- Hg Recoveries Pty Ltd.	33
	ICI/Orica Botany NSW mercury cell Chlor-Alkali plant emissions quantification and impacts potential for local Botany area Residents	On-going	Local	- Hg Recoveries Pty Ltd.	34
	Mercury response and remediation at the Architect of the Capitol, Washington DC	Completed	Local	- Cardno ENTRIX	35
	Response and remediation of mercury release at gas storage facility	Completed	Local	- Cardno ENTRIX	35

2. Detailed Information on Partner Projects by Types of Wastes Addressed

a. Multiple Types of Mercury Wastes

Target waste	Multiple Types of Mercury Wastes (Household wastes, incineration and landfilling of wastes)
Phase of project	☐ Completed ☒On-going ☐Under planning Technical guidelines above have been adopted by the Conference of the Parties (COP)
Level of intervention	☐Multilateral ☐Bilateral ☒National ☐Local
Name of Project	**Implementation of Basel Convention Technical Guidelines on Certain Wastes (other than "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury")**
Contribution to Partnership Area objectives	(1) <u>Priority action addressed by the project</u> ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.2. Contribution to the finalization of the Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) <u>The stage of waste management addressed by the project</u> ☒ a. Development of policy framework ☒ b. Reduction of mercury wastes (e.g. substitution of mercury-containing products) ☒ c. Collection/separation of mercury wastes ☒ d. Interim storage of collected mercury-containing products ☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ f. Removal of mercury in flue gas and wastewater from waste management activities

	☒ g. Stabilization and solidification of mercury wastes ☒ h. Final disposal of mercury wastes
Implementing agency, partners	Parties of the Basel Convention
Aim of project	To promote environmentally-sound management of waste
Achievements up to present	Basel Convention Technical Guidelines of relevance have been developed and adopted by the Parties to the Basel Convention, namely: environmentally sound management of household waste; technical guidelines on the incineration on land; and technical guidelines on specially engineered landfills (already developed and adopted)
Project starting/ completion date	- Technical Guidelines on Wastes Collected from Households adopted in COP 2, 1994 - Technical guidelines on the incineration on land adopted in COP 3, 1995 - Technical guidelines on specially engineered landfills adopted in COP 3, 1995
Contact information	- Person in charge: Ibrahim Shafii, Secretariat of the Basel Convention (SBC) - E-mail address: ibrahim.shafii@unep.org
URL	http://www.basel.int/meetings/sbc/workdoc/techdocs.html
Last updated on	21/06/2010

Target waste	Multiple Types of Mercury Wastes
Phase of project	☒ Completed ☐On-going ☐Under planning Final workshop scheduled in Aberdeen, 21-23 June 2010 Final report under preparation
Level of intervention	☒ Multilateral ☐Bilateral ☐National ☐Local
Name of Project	**Mercury Waste Management Project**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.2. Contribution to the finalization of "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury" ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ c. Collection/separation of mercury wastes
Implementing agency, partners	- UNEP Chemicals - Governments of Burkina Faso, Cambodia, Pakistan, Philippines, and Chile - Financial support from Government of Norway
Aim of project	- To increase the technical capacity to manage mercury waste in an environmentally sound manner; - Contribution to the further development of the Draft Basel Technical Guidelines
Activities	1. Review of the national mercury inventories; 2. Prioritization of mercury sources and the corresponding sectors; 3. Development of a national mercury waste management plan; 4. ESM application in selected sources and sectors; 5. Sampling and mercury analysis of environmental and human samples; 6. Final national reports and final project report; lessons learned; evaluation of project.
Achievements up to present	Final global workshop held June 2010 <Burkina Faso> · Project manager and team assigned · National workshop held in Ouagadougou, 9-11 November 2009

	· National samples analyzed · Final workshop 2010 <Cambodia> · Inception workshop in June/July 2009 · Identification of sectors and sources of mercury release · Development of draft waste management plan · National samples analyzed · Final workshop, June 2010 <Pakistan> · National inception workshop held (30 July 2009) and final workshop planned (late May 2010) · Identification of priority areas · National samples analyzed · Final workshop 2010 <Chile> · Coordination committee established · National workshop held (Nov 2009) · mercury analysis by CENMA · 4 national coordination meetings · Development of draft waste management plan · Information workshop for Andacello mine, remediation plan, 19 March 2010 · National samples analyzed for mercury <Philippines> · 1st National Workshop held (Feb 16, 2010) · Identification of priority areas · Final workshop 2010
Budget	USD 499,000, funded by Government of Norway
Project starting/ completion date	Project starting date: 08/2008 Project completion date: 06/2010
Contact information	Dr. Heidelore Fiedler, UNEP Chemicals Tel.: +41 (22) 9178187; e-mail: heidelore.fiedler@unep.org
URL	http://www.unep.org/hazardoussubstances/Mercury/InterimActivities/Partnerships/WasteManagement/WasteManagementProject/tabid/3538/language/en-US/Default.aspx
Last updated on	07/07 /2010

Target waste	Multiple Types of Mercury Wastes
Phase of project	☐ Completed ☐ On-going ☒ Under planning
Level of intervention	☒ Multilateral ☐ Bilateral ☐ National ☐ Local
Name of Project	**"Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury"**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.2. Contribution to the finalization of Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project

	☒ a. Development of policy framework ☒ b. Reduction of mercury wastes (e.g. substitution of mercury-containing products) ☒ c. Collection/separation of mercury wastes ☒ d. Interim storage of collected mercury-containing products ☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ f. Removal of mercury in flue gas and wastewater from waste management activities ☒ g. Stabilization and solidification of mercury wastes ☒ h. Final disposal of mercury wastes
Implementing agency, partners	BRS Secretariat, with support from Japan serving as lead country
Aim of project	Development of Basel Convention "Updated Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury" until COP 12 (May 2015)
Achievements up to present	The first version of the Guidelines was adopted at COP10 (October 2011)
Project starting/ completion date	Development of the updated Technical Guidelines would start in September 2013, and the 1st draft will be prepared by December 2013.
Contact information	- Person in charge: Ibrahim Shafii, Basel, Rotterdam and Stockholm Convention Secretariat - E-mail address: ibrahim.shafii@unep.org or ibrahim.shafii@brsmeas.org
URL	The guidelines adopted at COP10 are available on the Basel Convention website at: http://www.basel.int/TheConvention/Publications/TechnicalGuidelines/tabid/2362/Default.aspx
Last updated on	19/07/2013

Target waste	Multiple Types of Mercury Wastes
Name of Project	**JICA Training Course "Hazardous Waste Management and Appropriate Disposal for Asia"**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams (2) The stage of waste management addressed by the project ☒ a. Development of policy framework
Implementing agency, partners	Japan International Cooperation Agency, Japan Environmental Sanitation Center
Aim of project	To assist officials of national and local governments in Asian countries enhancing capacities for planning hazardous waste management policies suitable to their conditions through providing them with basic knowledge and Japan's experiences in hazardous waste management
Activities	Conducting of training courses on hazardous waste management and appropriate disposals
Project starting/ completion date	Project started in 2007
Phase or stage of project	This training course has been provided once every year since 2007
Contact information	- Japan Environmental Sanitation Center +81-44-288-4937
Last updated on	21/06/2010

Target waste	Multiple Types of Mercury Wastes
Phase of project	☐ Completed ☒ On-going ☐ Under planning
Level of intervention	☒ Multilateral ☐ Bilateral ☐ National ☐ Local
Name of Project	**Sub-regional Capacity Building and Technical Assistance Project on Mercury Waste in Health and Other Sectors in Latin America and the**

	Caribbean (LAC) Region
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.2. Contribution to the finalization of "Draft Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury" ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ b. Reduction of mercury wastes (e.g. substitution of mercury-containing products) ☒ c. Collection/separation of mercury wastes ☒ d. Interim storage of collected mercury-containing products ☒ h. Final disposal of mercury wastes
Implementing agency, partners	Secretariat of the Basel Convention (SBC), Basel Convention Coordinating Centre (BCCC) in Uruguay, Governments of Argentina, Uruguay and Costa Rica
Aim of project	To develop inventories of Mercury wastes in the health sector and other sectors, to promote environmentally-sound management of mercury wastes according to the Basel Convention Technical Guidelines. To build a temporary storage facility in one participating country.
Activities	- Development of three national inventories in the health sector and/or other sectors - Development of three ESM plans for Mercury wastes management in the health sector and/or in other sectors - Awareness raising
Achievements up to present	- Coordinator contracted; - Agreement on national activities with partners in pilot countries; - Identification of priority economic sectors in the pilot countries. - Development of mercury management plan in health sectors; - Stakeholders were trained on developing inventories of mercury emissions and ESM plans for mercury wastes.
Budget	Funding from United States, additional co-funding received from Norway and Spain
Project starting/ completion date	Starting date: 11/2009 Costa Rica Project completed in 06/2013
Contact information	- Person in charge: Francesca Cenni, Secretariat of the Basel Convention (SBC) - E-mail address: francesca.cenni@unep.org
Last updated on	07/2013

Target waste	Multiple Types of Mercury Wastes
Phase of project	☐ Completed ☒On-going ☐Under planning Currently conducting the desk study
Level of intervention	☒ Multilateral ☐Bilateral ☐National ☐Local
Name of Project	**Mercury Storage and Waste Project**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.2. Contribution to the finalization of Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects

	☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) <u>The stage of waste management addressed by the project</u> ☒ a. Development of policy framework
Implementing agency, partners	UNEP/ Division of Technology, Industry and Economics (DTIE) Chemicals Branch in coordination with the Secretariat of the Basel Convention.
Aim of project	• To fill-in the gaps between the storage- and waste-related activities supported through the UNEP Global Mercury Partnership and other outputs of the Partnership in order to address the management of wastes consisting of, containing or contaminated with mercury in a coherent manner. • To assess horizontally or as part of overall hazardous waste management planning the outcomes and experiences of storage- and waste-related activities supported through the UNEP Global Mercury Partnership in participating countries.
Activities	1. Desk study to compile existing information of results, gaps, experiences, guidelines, etc. from projects/activities underway or completed; 2. Global consultation meeting to assess the materials, identify priority areas/issues and propose practical output; design of the pilots in three developing countries. Possibly to be held back-to-back with the Global Mercury Partnership Advisory Group meeting in September 2010; 3. Pilot study addressing model or typical situations in three developing countries facing mercury waste problems; preparation of a user-friendly and integrative guidance document (three different scenarios)
Achievements up to present	Planning of workshop to join mercury waste partnership achievements with mercury storage partnership achievements
Budget	600,000 Norwegian Kronen (approx. USD 100,000)
Project starting date and completion date	Starting date: April 2010 Completion date: December 2010
Contact information	Dr. Heidelore Fiedler, UNEP Chemicals Tel.: +41 (22) 9178187; e-mail: heidelore.fiedler@unep.org further contacts for storage Desiree Narvaez, UNEP Chemicals, e-mail desiree.narvaez@unep.org; at SBC Ibrahim Shafii, e-mail ibrahim.shafii@unep.org
Last updated on	22/07/2010

Type of waste	Multiple Types of Mercury Wastes
Phase of project	☐ Completed ☒On-going ☐Under planning
Level of intervention	☐ Multilateral ☐Bilateral ☒National ☐Local
Name of Project	**Environmental Sound Management of Mercury Containing Wastes**
Contribution to Partnership Area objectives	(1) <u>Priority action addressed by the project</u> ☒ a.1. Identification and characterization of mercury in waste streams ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) <u>The stage of waste management addressed by the project</u> ☒ a. Development of policy framework ☒ b. Reduction of mercury wastes (e.g. substitution of mercury-containing products) ☒ c. Collection/separation of mercury wastes ☒ d. Interim storage of collected mercury-containing products ☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ f. Removal of mercury in flue gas and wastewater from waste management activities ☒ g. Stabilization and solidification of mercury wastes ☒ h. Final disposal of mercury wastes

Implementing agency, partners	National bodies of Syria
Aim of project	Minimizing the releases and impacts of hazardous mercury waste to the environment and human beings.
Activities	(1) Developing the inventory of mercury and its compounds containing wastes through expansion of inventory process to combine the public, private and common sectors. - Preparing forms for gathering data on the type and quantity of mercury wastes which are obtained out of the various bodies' activities and the manner of dealing with such wastes (separation, gathering, transport, treatment, storage and disposal). - Gathering and analyzing information. - Identifying work priorities and national needs. (2) Developing separating system (3) Capacity Building (4) Raising awareness on health and environmental risks of mercury and its compounds and Encouraging to use alternatives (5) Laboratories developing
Achievements up to present	The national inventory of mercury releases 2008-2009 Asian Pilot Project+ the national action plan has been executed
Budget	200,000 USD
Project starting date and completion date	Starting date: January 2011 Completion date: June 2012
Contact information	- Person in charge: Engineer Eyad Ibrahim - Syrian Contact Person of Mercury Programme - Ministry of State for Environmental Affairs- Syrian Arab Republic - E-mail address: eyad-ib@hotmail.com, Eyadl2002@yahoo.com
Last updated on	25/5/2010 by Syrian Arab Republic

Target waste	Elemental Mercury & Mercury containing waste
Phase of project	☐ Completed ☐ On-going ☒ Under planning
Level of intervention	☐ Multilateral ☐ Bilateral ☒ National ☐ Local
Name of Project	**National Strategy for Elemental Mercury and Waste containing mercury ESM & temporary disposal area identification.**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ i. Other (please specify: Identification of potential Final disposal of mercury-containing wastes methods and places)
Implementing agency, partners	Health Secretary, National Environmental Agency, Alianza Contaminacion Cero (NGO) , Ecologic, S.A. (private Sector)
Aim of project	National Policy form ES Management and Disposition of elemental Mercury & mercury containing waste
Activities	National Legal Framework development, Public awareness campaigns, interinstitutional and intersectorial activities.
Achievements up to present	National Plan development is underway.
Budget	US$ 180,000.00 (US$20,000 already committed for Legal Framework development)
Project starting/ completion date	October 2012/ August 2013 (Legal Framework development) October 2014-June 2015 (Interinstitutional and Intersectorial activities and Public

	awareness campaigns implementation)
Collaboration with other partnership areas, activities under international conventions	UNEP/ROLAC Global Mercury Partnership´s Supply & storage area Basel Convention focal point
Contact information	Jorge G Conte B Alianza Contaminación Cero +507 6649-32220 +507 391-9181 Panama, Republic of Panama jconte23@yahoo.com
URL	www.mercuriocero.blogspot.com
Last updated on	15/07/2013

Target waste	Multiple Types of Mercury Wastes
Phase of project	☐ Completed ☒On-going ☐Under planning
Level of intervention	☒ Multilateral ☐Bilateral ☐National ☒Local
Name of Project	**Mercury Management Toolkit**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ b. Reduction of mercury-containing wastes (e.g. substitution of mercury-containing products)
Implementing agency, partners	Global Environment Facility, Society of Environmental Toxicology and Chemistry, UNEP-DTIE
Aim of project	Develop mercury management tool that will assist governments in mercury management prioritization assessment
Activities	Define components that will contribute to the prioritization scheme; determine resources needed to support the use of the tool; determine the fate and effect factor; use of initial environmental release media data from country-level inventories for implementation priorities
Achievements up to present	- Initial meeting set up at ICMGP in Edinburgh
Budget	
Project starting/ completion date	Start year 2013
Collaboration with other partnership areas, activities under international conventions	
Contact information	Dr. Svetoslava Todorova, Svetoslava.todorova@cardno.com
URL	
Last updated on	11/July/2013

b. Waste Products Containing Mercury

Target waste	Discarded portable batteries

Phase of project	☒ Completed ☐On-going ☐Under planning
Level of intervention	☐ Multilateral ☐Bilateral ☐National ☒Local
Name of Project	**Quantification and Characterization of Discarded Batteries in Yaoundé, from the Perspective of Health, Safety and Environmental Protection**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ c. Collection/separation of mercury wastes ☒ h. Final disposal of mercury wastes
Implementing agency, partners	Research and Education Center for Development (CREPD)
Aim of project	This study provided for the scale and characterization of the problem of discarded batteries to be evaluated and provided insights useful for proposing actions that might be taken to reduce the problem of mismanagement of battery wastes in a developing country such as Cameroon
Activities	Analyze of discarded portable batteries by output method: sampling, sorting, description of labeling (battery types, countries of origin, trademarks, chemicals systems and labeled chemical compositions and cautionary notes), data interpretation and discussions
Achievements up to present	Proposition of mechanism for the sound management of discarded batteries in a developing countries such as Cameroon
Budget	CFA Franc 2.000.000
Project starting/ completion date	June 2006/April 2008
Contact information	CREPD, P.O. Box 2970 Yaoundé, Cameroon, E-mail: crepdcentre@yahoo.com
Last updated on	July 2013

Type of waste	Waste Products Containing Mercury (Dental amalgam)
Phase of project	☐ Completed ☒On-going ☐Under planning
Level of intervention	☐ Multilateral ☐Bilateral ☐National ☒Local
Name of Project	**Mercury Dental Amalgam Collection and Recovery in Massachusetts, USA**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ b. Reduction of mercury wastes (e.g. substitution of mercury-containing products) ☒ c. Collection/separation of mercury wastes ☒ f. Removal of mercury in flue gas and wastewater from waste management activities
Implementing agency, partners	State of Massachusetts
Aim of project	Reduce mercury inputs to waste water and pollution attributable to wastewater and biosolids treatment and disposal.
Activities	Regulation requiring installation of amalgam separators was adopted in 2006. In Phase I, from 2004- 2006, incentives were provided for early compliance while

	regulations were being developed and adopted, and in Phase II, it became mandatory for dental practices to install amalgam separators for each dental chair where waste amalgam is generated
Achievements up to present	- More than 70% of dentists certified under the voluntary compliance program - Regulations mandating the use of amalgam separators adopted on schedule in 2006 - Compliance of audits indicate more than 95% of covered practices installed separators
Project starting/ completion date	Initiative started in 2004. The regulation requiring installation of amalgam separators was adopted in 2006
Contact information	C. Mark Smith, Ph.D., M.S., Massachusetts Department of Environmental Protection 1 Winter Street, Boston, MA 02108 c.mark.smtih@state.ma.us
URL	http://www.mass.gov/dep/service/dentists.htm
Last updated on	01/07/2010

Target waste	Waste Products Containing Mercury (Dental Amalgam)
Phase of project	☒ Completed ☐ On-going ☐ Under planning
Level of intervention	☐ Multilateral ☐ Bilateral ☐ National ☒ Local
Name of Project	**Mercury Dental Amalgam Collection and Recycling, Victoria, Australia**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ c. Collection/separation of mercury-containing wastes ☒ d. Interim storage of collected mercury-containing products ☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ i. Other (please specify: Recycling of mercury)
Implementing agency, partners	National members of FDI and IDM - Australian Dental Association (Victorian Branch) and Australian Dental Industry Association respectively. Also Environment Protection Agency Victoria, Melbourne Water Industry and CMA Eco-Cycle
Aim of project	To encourage purchase and installation of ISO 11143 compliant amalgam separators in private sector dental practices and the continued collection and recycling of the waste.
Activities	A part time project manager liaised with all stakeholders and held education sessions for the dentists. All installations claiming the 20% of costs were inspected by the project manager. A sliding scale of rebates operated over the 3 years of the project. Years 1 &2 the rebate was AU$1000 of purchase price of the amalgam separator or 20% of installation costs – whichever was greater reducing to AU$500 or 10% of costs in Year 3. A condition of the rebate was a signed amalgam waste collection agreement with a waste collector. A waste bundling agreement was put in place so the waste collector also collected fluorescent light fittings, x-ray films and developer, waste amalgam capsules and needle sharps.

	The waste collector sells replacement amalgam separator containers ranging from AU$140 to AU$340 depending on brand and capacity of the cup. The ADA Victoria Branch continues to remind members to have their waste collected through their magazines and website. Some dentists such as oral surgeons, periodontists, and orthodontists were excluded from the program as they neither place nor remove dental amalgam.
Achievements up to present	82% of approximately 1000 eligible dental practices in Victoria have installed ISO 11143 compliant amalgam separators under this voluntary system. Of the remainder some already had ISO 11143 compliant amalgam separators prior to the project commencing. Government funded clinics including hospitals were successfully lobbied by the partners to install amalgam separators. 356 kilograms of mercury have been recycled from the amalgam waste since program commenced, representing approximately 0.5kg per practice. This distilled mercury is on sold to a local Melbourne amalgam capsule manufacturer.
Budget	AU$1.2 million
Project starting/ completion date	June 2008 September 2011
Collaboration with other partnership areas, activities under international conventions	
Contact information	FDI – Dr Julian Fisher jfisher@fdiworldental.org IDM – Mrs Pam Clark pam@cattani.com.au
URL	www.dentistsforcleanerwater.com.au
Last updated on	20/05/2012

Type of waste	Waste Products Containing Mercury (Batteries)
Phase of project	☐ Completed ☒ On-going ☐ Under planning
Level of intervention	☐ Multilateral ☐ Bilateral ☒ National ☐ Local
Name of Project	**Get on with the Batteries: a Battery Collection Program (in Panama)**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ b. Reduction of mercury wastes (e.g. substitution of mercury-containing products) ☒ c. Collection/separation of mercury wastes ☒ d. Interim storage of collected mercury-containing products ☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ g. Stabilization and solidification of mercury wastes ☒ h. Final disposal of mercury wastes ☒ i. Other (please specify: Cero Mercury Hospital & Clinics facilities in Panama)
Implementing agency, partners	Alianza Contaminación Cero, Ecologic, S.A. Gabriela Batista Visual Artist, UNEP/ Regional office for Latin America and the Caribbean (PNUMA/ROLAC)
Aim of project	Promote alternatives to dry batteries use and collect & dispose properly used dry batteries from homes, schools, universities and businesses
Activities	Battery users in schools, houses, and small businesses keep the used batteries in plastic bottles and to periodically bring them to specific collection points for interim storage and final disposition. Promote local, national and regional legislation for an integral management of

	mercury containing products.
Achievements up to present	16,603.59 Kgs of used dry batteries 1.5 MM people informed 4,500 kids and professionals participated in workshops 200 concrete blocks containing used dry batteries produced Approx. 7.5 Kgs of mercury neutralized
Budget	US$ 60,000
Project starting/ completion date	July 2009 to June 2014
Contact information	Mr. Jorge G Conte B, Director/Founder, Alianza Contaminacion Cero (jconte23@yahoo.com)
Last updated on	07/2013

Target waste	Waste Products Containing Mercury (Fluorescent lightings)
Phase of project	☐ Completed ☒On-going ☐ Under planning
Level of intervention	☐ Multilateral ☐Bilateral ☒ National ☐Local
Name of Project	**Get on with CFL´s and fluorescent lighting: a Fluorescent Lighting Collection Program (in Panama)**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a. 3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ c. Collection/separation of mercury-containing wastes ☒ d. Interim storage of collected mercury-containing products ☒ g. Stabilization and solidification of mercury-containing wastes ☒ h. Final disposal of mercury-containing wastes
Implementing agency, partners	Zero Pollution Alliance, UNEP Regional Office, Ecologic, S.A.
Aim of project	Promote, inform, install collection systems for used CFL´s and Fluorescent light tubes & regulate their collection and final disposal.
Activities	Public awareness, workshops, private and public collection points, interim and final storage of waste containing mercury.
Achievements up to present	12 Allies (Banco General, Morgan & Morgan, Hospital y Clinica San Fernando, S.A. Suez Energy Central America, General Electric, Ace Hardware International, HP, Recicla Panama, FAS Panama) 19,231 fluorescent, mercury vapor lamps and CFL´s collected YTD • 45,4% Flourescent lamps (4 feets) • 25,7% CFL`s • 15,0% U Shaped flourescent lamps • 11,7% Flourescent lamps (2 feets) • 2.2% Other types of mercury containing lamps 155 Used Ballast 308 Kgs of carton boxes recycled 15.20 Kg of mercury retained Equivalent to 238 tons of CO2 reduced
Budget	US$ 90,000.00 (25% Zero Pollution Alliance 75% Public & Private funds)
Project starting/ completion date	Sept. 2012 Jul. 2015
Collaboration with other partnership areas, activities under international conventions	Mercury-containing Products Partnership Area, waste management area and supply & storage area.

Contact information	Mr. Jorge G Conte B, Director/Founder, Alianza Contaminacion Cero (jconte23@yahoo.com)
URL	www.mercuriocero.blogspot.com
Last updated on	07/2013

Target waste	Hospital wastes in Cameroon
Phase of project	☐ Completed ☒On-going ☐Under planning
Level of intervention	☐ Multilateral ☐Bilateral ☒National ☐Local
Name of Project	**Quantification and Characterization of Hospital Wastes and Set up of the ESM Systems for Hospital Wastes in Cameroon**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ b. Reduction of mercury wastes (e.g. substitution of mercury-containing products) ☒ c. Collection/separation of mercury wastes ☒ d. Interim storage of collected mercury-containing products ☒ h. Final disposal of mercury wastes
Implementing agency, partners	Research and Education Center for Development, Ministry of Public Health of Cameroon
Aim of project	Inventory and quantification of hospital wastes, characterization of present disposal practices of hospital waste in Cameroon and Set up a guidelines for the ESM of hospital wastes in Cameroon
Activities	Data collection on the types of Health Centers and Number of beds, …, Ground disposal practices and materials, Assessment of ESM practices
Achievements up to present	• The Ministry of Public Health granted a letter of collaboration with CREPD in the domain of Hospital Waste Management in Cameroon • Collection of some data and Networking with external organizations
Budget	On-going
Collaboration with other partnership areas, activities under international conventions	Ministry of Public Health of Cameroon
Contact information	CREPD, P.O. Box 2970 Yaoundé, Cameroon, E-mail: crepdcentre@yahoo.com, kuepouo@yahoo.com
Last updated on	07/2013

Target waste	Mercury-added Lamps
Phase of project	☐ Completed ☒On-going (assistance and resources available) ☐Under planning
Level of intervention	☐ Multilateral ☐Bilateral ☒National ☐Local
Name of Project	**(Awareness-raising and Educational project on collecting Mercury-added Lamps)**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework

	☒ c. Collection/separation of mercury-containing wastes ☒ d. Interim storage of collected mercury-containing products ☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ i. Other (please specify: infrastructure for recycling)
Implementing agency, partners	Association of Lighting and Mercury Recyclers, in concert with the US Environmental Protection Agency. In the US the ALMR working and coordinating partners for this project included: National Electrical Manufacturers Association Solid Waste Association of North America Northeast Waste Management Officials Association State of Hawaii, Department of Health Pacific Northwest Pollution Prevention Resource Center St. Regis Mohawk Tribe California Department of Toxic Substances Control Center for Ecological Technology University of South Carolina Vermont Department of Environmental Conservation Tennessee Department of Environment and Conservation
Aim of project	The purpose of the project was to create and produce resource information, and implement an outreach and educational program along with infrastructure for collecting and recycling spent mercury lighting. The targets of the project included each of the 50 States and US Territories, Native American Groups, NGOs, local government agencies and the commercial/business sectors for mercury lamp recycling.
Activities	- Produced educational materials, resource information and a plan for national outreach and implementation. Conducted outreach to over 100 national target organizations, who, in turn, presented to their memberships to influence lamp disposal decision making. Information was made available on CD, printed documents, presentations at national meetings, and via several websites such as www.almr.org, www.lamprecycle.org , and via the EPA mercury and lamp recycling web pages. - Conducted extensive regulatory policy analysis with comparisons and produced data base of links to all state government agencies and private resource information. Ongoing project of the ALMR - Targeted messages for lamp users, building owners, energy companies, environmental organizations, contractors, waste handlers etc. about the regulations and responsibilities surrounding proper end-of-life lamp management. - Prepared Power Point summaries and training modules for use by all.
Achievements up to present	- Coordination of the content among NGOs, the EPA, the 50+ state and tribal agencies, the lighting industry, the waste disposal industry, and hundreds of local government entities throughout the U.S. - Completed extensive Guidance manual for Solid Waste industry, printed copies distributed and web access provided. - Conducted over 100 outreach meetings and workshops throughout the U.S., including distribution of project resources to all participants. Extensive media coverage, press releases and articles published in national press. Produced radio Public Service Announcement distributed to 350 stations. - Ongoing management of a "Community Assistance program"- serving as technical resource to cities, counties and local organizations and generators seeking assistance with infrastructure, recycling data, access to recyclers, information on how to set up collection. We process referrals from all sources.
Budget	$815,000.00
Project starting/ completion date	Starting date:2002 Completion date:2007 with continuation of 'Community Assistance Program' continued through the present time.
Collaboration	-

with other partnership areas, activities under international conventions	
Contact information	Paul Abernathy, Executive Director
URL	www.almr.org www.lamprecycle.org
Last updated on	12/07/2012

c. Healthcare wastes

Target waste	Healthcare wastes
Phase of project	☐ Completed ☒On-going ☐Under planning Close to final
Level of intervention	☒ Multilateral ☐Bilateral ☐National ☐Local
Name of Project	**Revision of the Guideline "Safe Management of Wastes from Health Care Activities"**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ b. Reduction of mercury wastes (e.g. substitution of mercury-containing products) ☒ c. Collection/separation of mercury wastes
Implementing agency, partners	World Health Organization Department of Health Security and Environment
Activities	This guidance document describes the elements on the ESM of waste from health care facilities, including wastes containing mercury.
Achievements up to present	Under revision leading to the second edition
Contact information	Susan Wilburn, World Health Organization (wilburnS@who.int)
Last updated on	07/2013

Target waste	Healthcare wastes
Phase of project	☐ Completed ☒On-going ☐Under planning Implementation of project activities in each country
Level of intervention	☒ Multilateral ☐Bilateral ☐National ☐Local
Name of Project	**UNDP GEF Healthcare Waste Project (in Argentina, India, Latvia, Lebanon, Philippines, Senegal and Vietnam)**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.2. Contribution to the finalization of Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project

	☒ a. Development of policy framework ☒ b. Reduction of mercury wastes (e.g. substitution of mercury-containing products) ☒ c. Collection/separation of mercury wastes ☒ d. Interim storage of collected mercury-containing products
Implementing agency, partners	Funding Agency: Global Environment Facility Implementing Agency: United Nations Development Program Principle Cooperating Agencies: World Health Organization and Health Care Without Harm
Aim of project	Our global project is demonstrating and promoting the use of best practices and techniques for healthcare waste management in seven countries (Argentina, India, Latvia, Lebanon, Philippines, Senegal and Vietnam). The goal is to protect public health and the global environment from the impacts of dioxin and mercury releases.
Activities	The project focuses primarily on activities such as promoting the use of non-burn waste treatment technologies, improved waste segregation practices and the use of appropriate alternatives to mercury-containing devices. These activities are reflected in the following eight project objectives, which are detailed further in the project's logical framework matrix (PDF): 1. Establish model facilities and programs to exemplify best practices in healthcare waste management. 2. Deploy and evaluate commercially available, non-incineration healthcare waste treatment technologies appropriate to the needs of each country. 3. Develop, test, manufacture and deploy affordable, small-scale non-incineration technologies for use in sub-Saharan Africa. 4. Introduce and evaluate the use of mercury-free devices in model facilities. 5. Establish or enhance training programs to build capacity for the implementation of best practices and technologies both within and beyond the model facilities and programs. 6. Review and update relevant policies. 7. Disseminate project results and materials to stakeholders and hold conferences or workshops to encourage replication. 8. Make project results on demonstrated best techniques and practices available for dissemination and scaling-up regionally and globally.
Achievements up to present	Please refer to our February 2010 project update at the following link: http://gefmedwaste.org/downloads/Project%20Update%20February%202010.pdf
Budget	Total Project Budget: $23,296,949 USD Total Mercury Component Budget: $999,500 USD (including co-financing)
Project starting date and completion date	03/2008-06/ 2012
Contact information	- Person in charge : Dr. Jorge Emmanuel, Chief Technical Advisor, UNDP GEF Healthcare Waste Project - E-mail address: jorge.emmanuel@undpaffiliates.org
Last updated on	09/06/2010

Target waste	Healthcare wastes
Phase of project	☐ Completed ☒On-going ☐Under planning
Level of intervention	☐ Multilateral ☐Bilateral ☒National ☐Local
Name of Project	**Environmentally Sound Implementation of Healthcare Waste Management Plan in Nigeria**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒a. Development of policy framework

	☒ c. Collection/separation of mercury wastes ☒ d. Interim storage of collected mercury-containing products
Implementing agency, partners	Government of Nigeria
Aim of project	Provide an approach to the management of healthcare waste that is safe for healthcare facilities, waste handlers, the public and the environment as well as being cost effective and practical.
Activities	Development and implementation of Action Plan, Guidelines, and Policy/Bill for healthcare waste
Achievements up to present	Completion of inventory and Action Plan, Guidelines, and Policy/Bill for healthcare waste management including healthcare wastes containing mercury.
Project starting/ completion date	Project started 2002 with inventory. Implementation will start as soon as FEC approves the establishment of NSC. Currently, Awaiting FEC approval to establish NSC. Implementation has not started.
Contact information	- Dr. O. O. Dada (droodada@yahoo.co.uk) - Dr. Aisha Usman Mahmood (aishaddly@yahoo.com) - Mr. John Adefemi Adegbite (johnadefemiadegbite@yahoo.com) - Dr. Livinus Nnamdi Nwamkwo (nnamdi2livi@yahoo.com)
Last updated on	25/06/2010

d. Mine tailings

Target waste	Mine tailings
Phase of project	☒ Completed ☐ On-going ☐ Under planning Final deliveries available shortly
Level of intervention	☒ Multilateral ☐ Bilateral ☐ National ☐ Local
Name of Project	**Technical/chemical and Economic Assessment of Mercury-containing and Hg-contaminated Tailings from the Mining Sector in Developing Countries**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ i. Other (please specify: Identification of mercury contaminated sites; economic feasibility study)
Implementing agency, partners	UNEP Chemicals, Governments of Chile and Ghana GRS as subcontractor
Aim of project	The project aims for a feasibility study on the options that the mercury or the precious metal content in tailings – as a sellable product – will pay for the environmentally sound remediation of such sites.
Activities	National activities carried out at national level; reports almost finalized.
Achievements up to present	Study on technical-economical feasibility authored by GRS (report accepted; publication in preparation)
Budget	Grant: USD 200,000
Project starting/ completion date	Starting date: 1/12/2008 Termination date: 31/12/2009
Contact information	Dr. Heidelore Fiedler, UNEP Chemicals Tel.: +41 (22) 9178187; e-mail: heidelore.fiedler@unep.org
URL	http://www.unep.org/hazardoussubstances/Mercury/InterimActivities/Partnerships/Addendum/tabid/3536/language/en-US/Default.aspx

Last updated on	07/07/2010

Type of waste	Mine tailings
Phase of project	☒ Completed ☐ On-going ☐ Under planning
Level of intervention	☒ Multilateral ☐ Bilateral ☐ National ☒ Local
Name of Project	**The Model Study in the Philippines for the Establishment of the Mercurial Environmental Pollution Improvement Program**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in tailings ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ i. Other: Removal of mercury from mine tailings
Implementing agency, partners	Department of Science and Technology, Philippines Benguet Federation of small-scale miners Department of Geology, University of the Philippines Geological Survey of Denmark and Greenland Japan Atomic Energy Agency
Aim of project	Extract mercury from tailings produced by small-scale /artisanal gold miners
Activities	Building and testing pilot mercury extraction plant
Achievements up to present	Determining suitable testing sites for the pilot plant and carry out preliminary sampling and analysis of the tailings for mercury and gold
Budget	75,000 $US
Project starting date and completion date	January 1st, 2010 March 31th, 2012
Contact information	- Peter W. U. Appel. Geological Survey of Denmark and Greenland - E-mail address: pa@geus.dk
Last updated on	10/05/2012

e. Sites Contaminated with Mercury Wastes

Type of waste	Sites contaminated with mercury
Phase of project	☐ Completed ☒ On-going ☐ Under planning Currently at the initial phase of investigation and assessment implemented and on-going.
Level of intervention	☐ Multilateral ☐ Bilateral ☐ National ☒ Local
Name of Project	**Peerless Green Initiative: Kodaikanal Mercury Thermometer Plant Pollution Assessment and Integrated Waste Management**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ c. Collection/separation of mercury wastes ☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ f. Removal of mercury in flue gas and wastewater from waste management activities ☒ i. Other (please specify: Remediation of site contaminated with waste containing mercury)

Implementing agency, partners	Peerless Green Initiatives, Chennai, India; Judicial Branch, Eco-Tribunal Supreme Court, Government of India UNEP Mercury Program Partners (to be decided) UNITAR UNIDO Anna University, Chennai (proposed) National Atomic Laboratory, Hyderabad (proposed) Private stakeholders and NGO's
Aim of project	Assure proper remediation of the areas affected by the release of mercury into the environment by a former mercury thermometer manufacturing plant located in the ecologically sensitive residential location of Kodaikanal, India
Activities	Risk analysis and environmental impact assessment of the proposed technical environmental remediation measures (on-site); Detailed planning and engineering design of affected areas (off-site); Public awareness and health risk prevention; Remediation training, public and private sector capacity building and exchange of good practices; Establishment of an environmental monitoring system; Project coordination.
Achievements up to present	Comparative analysis and environmental impact of the proposed technical environmental remediation measures and the risk of contamination during the proposed waste management plan has been achieved. Investigation of the scope of affected areas has been hypothesized. Preliminary plan for the sampling and testing of affected areas is underway, the balance of planning and engineering design of affected areas to be drafted contingent on testing results and analysis. Formation of strategic alliances and capacity building is on-going. Public awareness campaign has resulted in ground-support and appreciation of human and environmental risks. Plan of coordination has been drafted and business plan is drafted, subject of revision based on findings of sample studies. Pro-action by stakeholders through Government of India Judiciary is ongoing with intent to compel good practices and expanded scope of impact assessment. analysis
Budget	$85,000USD (First Phase)
Project starting date and completion date	October 2009 January 2012
Contact information	- Person in charge: Frank Costanzo, Peerless Green Initiatives - E-mail address: frank@peerlessgreen.net
Last updated on	01/06/2010

Type of waste	Sites contaminated with mercury wastes
Phase of project	☐ Completed ☐ On-going ☒ Under planning
Level of intervention	☐ Multilateral ☐ Bilateral ☐ National ☒ Local
Name of Project	**Mercury Contamination of a Water-catchment at an at-risk Eco-sensitive Rainforest Inhabited by Disenfranchised Tribals Caused by Pollution from Mercury Thermometer Factory in Kodaikanal, Tamil Nadu, India**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ c. Collection/separation of mercury wastes ☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ f. Removal of mercury in flue gas and wastewater from waste management activities

	☒ i. Other (please specify: Remediation of site contaminated with waste containing mercury)
Implementing agency, partners	Peerless Green Initiatives EVIDENCE, India (NGO) SDDIT, India (NGO) Department of Forestry, India Government of India, Eco-Tribunal Anna University, Chennai (proposed) National Atomic Laboratory, Hyderabad (proposed)
Aim of project	This project is in tandem with PGI's related project to assess the contamination of public and private lands outside the perimeter of a mercury thermometer plant at the Eastern spur of the Western Ghats, Kodaikanal, Tamil Nadu, and India. Both projects are designed to offer a platform for a model integrated plan for the waste management of at least 400kg of mercury deposited in the soil during the 18 year operation of the subject factory until its closing in 2001. The site has been 'static' insofar as no remediation plan has been implemented and accordingly offers researchers an opportunity to study the migration of mercury from an area that last tested eight years ago. It is also a project that can highlight the mission of the Programme in that the polluted area is flanked on one side by residential properties and a State protected endangered rain forest that is number 18 on Conservation International's 'hot spot' list. As such, this particular prong of the overall Kodaikanal scheme involves the empirical sampling and analysis of water and sediment in the catchment area of the factory. 80% of ground water run-off from the factory site is channeled from the factory property where it drops precipitously over 1000 meters into a catchment that travels 30 kilometers to a water reservoir used for agro-irrigation and drinking water. Along this 30km journey, down the mountain-valley (the Lower Palanis) passing numerous tribal settlements who use the water in its untreated form for washing, cooking, drinking, livestock and agriculture. Thus far the tribals and natural capital advocates have been disenfranchised from the proposed action plan mainly due to only random and selective off-site testing of soil sediment and water by a private environmental engineering company hired by the polluter and managed by a former employee of the polluter. Lastly, the program allows for the opportunity to 'update' the proposed action plan to come into line with the 2007 Basel Convention as the guidelines for waste management did not exist at the time the plan was authored in 2006.
Activities	To avoid redundancy, the general activity requirements are detailed in PGI's previously filed Information Report. Distinct to this program is a need for an integrated approach for the testing and waste streams of mercury in the water catchment as well as potentials for re-contamination through waste management process. Retrospective long term study of affects of mercury on tribals is an area in need of development and international humanitarian cooperation.
Achievements up to present	Petition to Eco-Tribunal of Supreme Court under polluter-pays principle is underway and provide framework for Government and UNEP intervention, analysis and capacity building. The entire data-set of existing testing, evaluation, proposed plan for waste management, reports of Pollution Control Board and other monitoring agencies have been fully reviewed and are being uploaded into digital format for the ease of international advisers and partnership review. A plan of action has been detailed including scope of project, necessary inputs and potentials for meaningful program success. Public awareness and capacity building has resulted in a firm foundation of understanding of necessary
Budget	$75,000USD
Project starting/ completion date	July 2010-July 2012
Contact information	Person in charge: Frank Costanzo, Peerless Green Initiatives E-mail address: frank@peerlessgreen.net
Last updated on	21/06/2010

Target waste	Historical gold mining area
Phase of project	☐ Completed ☒On-going ☐Under planning
Level of intervention	☐ Multilateral ☐Bilateral ☒National ☐Local
Name of Project	**Upper Goulburn River Feral mercury recovery project**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ c. Collection/separation of mercury-containing wastes ☒ d. Interim storage of collected mercury-containing products ☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ h. Final disposal of mercury-containing wastes ☒ i. Other (please specify: On site retorting of sediments to recover mercury)
Implementing agency, partners	H.G Recoveries Pty Ltd – Upper Goulburn River Feral mercury recovery project
Aim of project	Location of and removal of about 4900 tons of Mercury from a historical gold mining area in a major drinking water catchment.
Activities	Location of feral mercury and treatment of sediments to recovery mercury
Achievements up to present	Construction of a historical mercury pollution data base based on historical records from over 150 years of gold mining operations. Extensive stream sediment sampling coupled with sampling of remaining crusher fines piles. Development of a bankable business case to demonstrates the “no cost case” to remove this toxic metal and rehabilitate the River Catchment to pre-habitation baseline. The project has demonstrated very clearly that pre-1920’s gold mining operations were only recovering about 50% of the gold in ore – were not recovering any of the other metals such as platinum, vanadium, tungsten cobalt, arsenic, lead, chromium or nutrients such as phosphorous & potassium. Extensive ongoing legal threats by the Victorian Government to prevent the project progressing due to a political agenda that maintains “mercury is only a natural mineral and therefore does not represent a risk to the community, water or fish safety”. Project will proceed when the inevitable change of government occurs in the State of Victoria.
Budget	$A 400+ million – project is capable of being self-funding
Project starting/ completion date	10/2010 - Start date, finish date now late 2022
Collaboration with other partnership areas, activities under international conventions	Abandoned Mines Group, University of Queensland, Australia
Contact information	Andrew Helps +61 3 56 22 00 40; email agroeco@bigpond.com
URL	
Last updated on	07/2013

Target waste	Sites contaminated with mercury
Phase of project	☐ Completed ☒On-going ☐Under planning
Level of intervention	☐ Multilateral ☐Bilateral ☒National ☒Local

Name of Project	**Reduce exposure of mercury to human health and the environment by promoting sound chemical management in Mongolia**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ c. Collection/separation of mercury-containing wastes ☒ g. Stabilization and solidification of mercury-containing wastes ☒ h. Final disposal of mercury-containing wastes
Implementing agency, partners	UNIDO and Ministry of Nature and Green Development of Mongolia, Mine Reclamation Corporation (Mireco), Ministry of Health
Aim of project	The project will strengthen national and local capacity to effectively manage and reduce mercury emissions
Activities	1. Establish a regulatory framework and national guidelines for environmentally sound management of mercury containing waste 2. Developing capacity for the implementation of remediation and stabilization techniques in mercury hot-spot areas through demonstration activities at the pilot scale 3. Disseminating information and raising awareness through campaigns on mercury health and environment risk reduction
Achievements up to present	Project was approved by the GEF in June 2013
Budget	USD$600,000 (GEF) and USD$1,569,000 co-financing from Ministry of Nature and Green Development, Ministry of Health, Mireco and UNIDO
Project starting/ completion date	June 2013 – June 2015
Contact information	Mr. Jérôme Stucki, UNIDO, j.stucki@unido.org
Last updated on	07/2013

Target waste	Sites contaminated with mercury
Phase of project	☐ Completed ☐On-going ☒Under planning
Level of intervention	☐ Multilateral ☐Bilateral ☒National ☒Local
Name of Project	**Preparatory project to facilitate the implementation of the legally binding instrument on mercury (Minamata Convention) in Argentina to protect health and the environment**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ i. Other (please specify: the project will make an assessment of the mercury waste management and disposal options currently available in the country, and based on the assessment develop a follow up proposal for a pilot, demonstrative project on the interim storage and final disposal of mercury containing waste.)
Implementing agency, partners	UNIDO and the Asociación Argentina de Médicos por el Medio Ambiente, AAMMA (Argentinean Society of Doctors for the Environment).
Aim of project	The project will strengthen national and local capacity to effectively manage mercury and mercury containing waste.
Activities	1. Assess the current regulatory framework on mercury and propose any

	necessary changes to facilitate compliance with the forthcoming Minamata Convention 2. Assess the BAT/BEP options available in the country, as well as the various mercury waste streams to propose possible solutions in cooperation with the Government, private sector and civil society. 3. Disseminate information and raise awareness through an online Clearing House on mercury and the Minamata Convention.
Achievements up to present	n/a
Budget	USD$350,000 (GEF) and USD$530,000 co-financing from AAMMA, the Basel Convention Regional Centre for South America, the National Institute of Industrial Technology (INTI) of Argentina and UNIDO
Project starting/ completion date	Jan 2014 – December 2015
Contact information	Ms. Carolina Gonzalez, UNIDO, c.gonzalez-castro@unido.org
Last updated on	07/2013

Target waste	Re-Processing Mercury Contaminated Calcined Ores
Phase of project	☒ Completed ☐On-going ☐Under planning
Level of intervention	☐ Multilateral ☐Bilateral ☐National ☒Local
Name of Project	**Liddell's Calcined Sands stockpile site Bendigo, Victoria, Australia**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ c. Collection/separation of mercury-containing wastes ☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ h. Final disposal of mercury-containing wastes ☒ i. Other (please specify:)
Implementing agency, partners	Hg Recoveries Pty Ltd, Warragul, Victoria, Australia.
Aim of project	To provide impacted residents with an option other than the government mandated above ground burial by soil/clay only of extremely toxic calcined crusher fines (containing high levels of arsenic, mercury. lead plus others)
Activities	Develop a "no cost option to government" to remove and rehabilitate these materials from the site to a pre-habitation baseline.
Achievements up to present	Extensive sampling and testing of the materials, compilation of an inventory of metals in the sands and development of a business plan to remove the calcined sands from the site at no cost to the State Government. Business plan indicated a 'no cost option to the State' by removing these toxic materials and re-processing to recover commercially valuable entrained metals. State Government adopted 'scientifically flawed expert advice' that above ground covering of these 'calcined fines' was the best option, for an estimated cost of $A10+ million, despite on-going failure of two previous similarly 'buried' contaminated sites which continue to the present day leaching both elemental and compounds of mercury and arsenic into the surrounding environment.
Budget	$A120,000
Project starting/ completion date	September 2012 January 2013
Collaboration	Centre for mined Land Rehabilitation - University of Queensland (UQ)

with other partnership areas, activities under international conventions	www.cmlr.uq.edu.au Mercury Supply and Storage Convention on Biological Diversity
Contact information	Andrew Helps +61 3 56 22 00 40; email agroeco@bigpond.com
URL	
Last updated on	07/2013

Target waste	Mercury Contamination from a Major Mercury Cell Chlor-Alkali Plant
Phase of project	☐ Completed ☒On-going ☐Under planning
Level of intervention	☐ Multilateral ☐Bilateral ☐National ☒Local
Name of Project	**ICI/Orica Botany NSW mercury cell Chlor-Alkali plant emissions quantification and impacts potential for local Botany area Residents**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ a. Development of policy framework ☒ c. Collection/separation of mercury-containing wastes ☒ h. Final disposal of mercury-containing wastes ☒ i. Other (please specify:)
Implementing agency, partners	Hg Recoveries Pty Ltd – project is called the ICI/Orica Botany NSW mercury cell Chlor-Alkali plant emissions quantification and impacts potential for local Botany area Residents.
Aim of project	To back-cast plant mercury emissions from commencement of production in 1941 to provide justification for a Halo testing program to quantify potential mercury impacts to offsite areas, e.g., domestic residences and parklands.
Activities	Historical production data search, assessment of emissions from similar plants in the UK, production of emissions spreadsheet and power point presentation on this issue for the Botany residents.
Achievements up to present	This plant was decommissioned in 2002 but is still emitting approximately 11 tons of gaseous mercury per year (Orica data) due to lack of proper site rehabilitation. Project has achieved greater 'residents awareness' of the risks from liquid waste, spillages and atmospheric deposition of mercury emanating from this plant and identification of significant mercury pollution of Botany Bay and possibly nearby RAMSAR Wetlands. Large range of other chemicals now being found in offsite soil surveys including PCB's, HCB, BaP, Chlorine, pesticides, herbicides and fungicides etc.
Budget	$A 210,000
Project starting/ completion date	April 2012 - ongoing
Collaboration with other partnership areas, activities under international conventions	IPEN International POP's Elimination Network. Australian National Toxics Network INC Additionally, this location has over 10,000 tons of HCB stored on site.
Contact information	Andrew Helps +61 3 56 22 00 40; Email agroeco@bigpond.com
URL	
Last updated on	07/2013

Target waste	Elemental mercury, mercury impacted debris and water
Phase of project	☒ Completed ☐ On-going ☐ Under planning
Level of intervention	☐ Multilateral ☐ Bilateral ☐ National ☒ Local
Name of Project	**Mercury response and remediation at the Architect of the Capitol, Washington DC**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ b. Reduction of mercury-containing wastes (e.g. substitution of mercury-containing products) ☒ c. Collection/separation of mercury-containing wastes ☒ d. Interim storage of collected mercury-containing products ☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ h. Final disposal of mercury-containing wastes
Implementing agency, partners	Cardno ENTRIX
Aim of project	Render facility safe for continued occupancy by workers
Activities	Release response, identification of mercury and identify extent of contamination; removal of elemental mercury; recovery of mercury from drains and piping; air testing to verify removal met OSHA TLV requirements; characterization and disposal/recycling of debris, water, and elemental mercury.
Achievements up to present	Area is safe for continued occupancy.
Budget	$150,000
Project starting/ completion date	May 2009 to August 2009
Collaboration with other partnership areas, activities under international conventions	Washington DC environmental managers; utility environmental coordinators;
Contact information	Mr. Michael Kinder, mike.kinder@cardno.com
URL	
Last updated on	10 July 2013

Target waste	Elemental mercury, mercury impacted debris
Phase of project	☒ Completed ☐ On-going ☐ Under planning
Level of intervention	☐ Multilateral ☐ Bilateral ☐ National ☒ Local
Name of Project	**Response and remediation of mercury release at gas storage facility**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste (2) The stage of waste management addressed by the project ☒ b. Reduction of mercury-containing wastes (e.g. substitution of mercury-containing products) ☒ c. Collection/separation of mercury-containing wastes ☒ d. Interim storage of collected mercury-containing products

	☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ g. Stabilization and solidification of mercury-containing wastes ☒ h. Final disposal of mercury-containing wastes
Implementing agency, partners	Cardno ENTRIX
Aim of project	Render facility safe for continued occupancy by workers
Activities	Release response, identification of mercury and identify extent of contamination; removal of elemental mercury; recovery of mercury from drains and piping; air testing to verify removal met OSHA TLV requirements; characterization and disposal/recycling of debris, water, and elemental mercury.
Achievements up to present	Area is safe for continued occupancy.
Budget	$50,000
Project starting/ completion date	February 2012 to March 2012
Collaboration with other partnership areas, activities under international conventions	Virginia Department of Environmental Quality, utility environmental coordinators
Contact information	Mr. Michael Kinder, mike.kinder@cardno.com
URL	
Last updated on	10 July 2013

3. CROSS-REFERENCE: Relevant activities under other partnership areas

The following activities are conducted under different partnership areas. For more details on these projects, please see the Business Plans of the corresponding partnership area[10].

Mercury-Containing Products

The objective of this partnership area, led by the U.S. Environmental Protection Agency, is to phase out and eventually eliminate mercury in products and to eliminate releases during manufacturing and other industrial processes via environmentally sound production, transportation, storage, and disposal processes.

The cooperation between the Waste Management Partnership and the Mercury-Containing Products Partnership is especially important in order to encourage and implement environmentally sound management of mercury waste by following a lifecycle management approach.

Some of the key activities of the Mercury-Containing Products include the following.

(a) On-going health-care projects aimed at reducing the use of mercury-containing measuring and control devices, including projects in Argentina, Brazil, Chile, Costa Rica, Ecuador, Honduras, Mexico, Nepal and Tanzania;

(b) Five year project (to 2012) with the Secretariat of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal to build capacity and promote best management practices for addressing mercury waste collected from health care products and in other sectors addressing mercury in products. Projects are focused in Argentina, Costa Rica and

(c) On-going mercury inventory and risk management planning activities sponsored by the United States of America and implemented through the United Nations Institute for Training and Research in Chile, Ecuador, Panama and South Africa.

[10] "UNEP(DTIE)/Hg/PAG.2/3 - Partnership area business plans" is available from http://www.unep.org/hazardoussubstances/Portals/9/Mercury/Documents/PAG-meetings/DRAFT%20HG%20PAG%202-3%20Business%20plans.pdf

(d) Project on production of an educational video for hospital personnel on mercury waste management in English and Spanish implemented by Health Care Without Harm (HCWH) under the WHO-HCWH Global Initiative for Mercury-Free Health Care (the production is scheduled to be completed in September 2011)

Artisanal and Small-scale Gold Mining

This Partnership, jointly led by United Nations Industrial Development Organization (UNIDO) and the Natural Resources Defense Council (NRDC), aims for continued reduction and elimination of mercury uses and releases in artisanal and small-scale gold mining (ASGM). Some of its recent activities include facilitating formulation of AGSM strategic plans, providing input on Standard Zero (promotion of responsible mercury and cyanide use), development of technical guidance and legalization/formalization guidance documents.

The ASGM Partnership has a strong interest in reducing the amount of mercury present in tailings. Close links will be established with the Mercury in Waste Partnership.

Mercury Supply and Storage

This partnership, led by the Zero Mercury Working Group, has a short anticipated life or only until 2013. The partnership focuses on Kyrgyz Republic Primary Mercury Mining project, regional projects to provide storage options of metallic mercury and technical support to INC.

The Mercury Supply and Storage Partnership Area will cooperate with the Mercury Waste Partnership Area particularly regarding storage aspects. Coordination with projects on the environmentally sound of management of mercury waste (UNEP Chemicals-SBC projects in Burkina Faso, Cambodia, Chile, Pakistan, Philippines and the USEPA-SBC projects in Argentina, Costa Rica, and Uruguay (joint project with Products partnership area) is expected. (For details, please see the Business plan of the Artisanal and Small Scale Gold Mining (ASGM) Partnership Area).

OTHER ACTIVITIES

In addition, the USEPA conducts related projects as follows.

- Partnership with Russian Association of Chlorine Industry to implement a project on environmentally-safe management of mercury waste, as described in the chlor-alkali business plan.
- Activities with Arctic Contaminants Action Program of the Arctic Council to develop an Integrated Hazardous Waste Management Strategy. Regulations for safe storage of mercury surplus and mercury waste (e.g. pesticides) are being developed under this program.
- A project in Kazakhstan titled: “Bio-remediation monitoring of mercury contamination at Pavlodar Chemical plant.”

V. Opportunities:

Possible actions in response to the priority actions include the followings:

Priority action a): Identify environmentally sound collection, transportation, disposal and treatment techniques for mercury waste following a lifecycle management approach.

- Develop a training manual for countries to apply “Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury”, including sector specific guidance.
- Formulate and implement projects utilizing “Good Practices for Management of Mercury Releases from Waste”.

- Review available information on existing BAT/BEP for mercury waste management. In doing so, cooperate with other partnership areas, chemical conventions, Strategic Approach to International Chemicals Management (SAICM) and the INCs.
- Target pilot projects on mercury waste management in cooperation with other partnerships, institutions, organizations (*e.g.* Secretariat of the Basel Convention) and public interest and health NGOs. Such projects may include waste separation, segregation, collection transportation, recovery or disposal technologies and may address air emissions, landfill design and operation including evaporation and seepage water, and use of appropriate stabilization/solidification technologies.

Priority action b): Assess environmental impacts of current waste management practices and processes, including providing support to countries to assess their national situation, interests and needs.

- Enhance information/knowledge, including improving release inventories (including the Mercury Toolkit, European Monitoring and Evaluation Programme (EMEP) Guidebook and national/regional Pollutant Release and Transfer Registers) with an emphasis on mercury waste streams.
- Assess the importance of mercury waste in the national mercury inventories and make suggestions for the improvement of the UNEP Mercury Toolkit.
- Promote safe handling procedures for collection, transportation and management for the segregated mercury wastes and waste handling devices.

Priority action c): Promote awareness and education on mercury waste:

- In cooperation with civil society and NGOs, develop and disseminate educational materials including practical and simple advice on steps to deal with current mercury waste issues of concern (*e.g.,* what to do with discarded mercury fever thermometers, sound temporary storage and safeguarding solutions).

VI. Evaluation

The partnership areas will report biennially to UNEP in accordance with the UNEP reporting format, which includes the report on progress in terms of the Partnership Area Progress Indicators.

Progress indicators

The Waste Management Partnership Area has developed its own progress indicators, which correspond to its priority actions. The indicators have been categorized as (1) output indicators and (2) process indicators, as shown in the table below.

Objective/Action	Indicator of Progress	Type of Indicator
Overall Objective: Minimize and, where feasible, eliminate unintentional mercury releases to air, water and land from mercury waste by following a lifecycle management approach.	Estimated amount of mercury diverted from waste stream by the implementation of the projects under the Partnership (including estimates of impacts of pilot projects implemented in a country)	Output Indicator
	Estimated amount of mercury releases from waste that are reduced from implementation of the projects under the Partnership	
	Number of Partners	Process Indicator

Objective/Action	Indicator of Progress	Type of Indicator
Priority Action a: Identify and disseminate environmentally sound collection, treatment, transportation and disposal techniques/practices to reduce mercury releases from waste by following a lifecycle approach	Available information on identification and characterization of mercury contained in waste streams	
	Completion of "Good Practices for Management of Mercury Releases from Waste" that supplements "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury"	
	Number of good practice cases added in "Good Practices for Management of Mercury Releases from Waste"	
	Number of projects formulated utilizing "Good Practices for Management of Mercury Releases from Waste"	
	Number of national projects on ESM of mercury waste implemented	
	Amount of financial resources for projects aimed for reducing releases of mercury from waste management	
Priority Action b: Assess environmental impacts of current waste management practices and processes, including providing support to countries to assess their national situation (e.g. development of national mercury waste inventories and priority setting) and needs	Number of countries that prepared national inventory of mercury waste, if possible, mercury release estimation from waste treatment and waste dumping	
	Number of countries with national policy frameworks/action plans with regard to mercury waste management [4]	
Priority Action c: Promote public awareness of the hazards regarding mercury waste and support community engagement in the activities of the Waste Management Partnership.	Number of projects to promote awareness and education regarding mercury waste	

VII. Resource Mobilization

Partners are encouraged to contribute financially and also to offer in-kind assistance.

Partners can develop specific initiatives, work with non-partners, or pursue projects consistent with the partnership objectives. It is hoped that the UNEP Global Mercury Partnership will serve as a mechanism to consolidate and leverage funding for large, strategic projects.

Partners are encouraged to apply for funding to relevant funders and regional organizations. Developing countries and countries with economies in transition can submit requests for funding to UNEP under the UNEP Mercury Small Grants Program (*see* www.chem.unep.ch/mercury/Overview-&-priorities.htm). UNEP and other partner implementing agencies stand ready to assist countries to

develop proposals addressing mercury issues under the SAICM Quick Start Programme (*see* www.chem.unep.ch/saicm/qsp.htm).

VIII. Business Planning Process

Business planning will take place annually for the partnership area. Business planning will be undertaken in close collaboration with the partners and the relevant Partnership Areas such as the Mercury-Containing Products Partnership Area and the Mercury Supply and Storage Partnership Area. The content of this Business Plan will be reviewed and revised in order to reflect the developments in the INC process to the extent possible.

The process in developing and reviewing business plans will be outlined in this section. Partnerships will take stock of efforts and test direction and productivity in moving forward and will adjust planning accordingly.

In accordance with Section 4 of the Overarching Framework for the UNEP Global Mercury Partnership, the business plan will be periodically reviewed and updated to reflect progress in implementation and changing circumstances. The arrangements for Administrative and Management Support are set out in Table below.

Administration and Management Support (will vary across the Partnerships)		**Source of Support**
Partnership Lead	▪ Facilitation and support of the partnership.	Japan (Prof. Dr. TANAKA)
Organization Point of Contact	• Preparing Business Plan. • Preparing for meetings. • Logging meeting notes, tracking action items. • Collaborating with partners to strategically link to overall partnership goals and objectives.	Japan, Ministry of the Environment
UNEP Secretariat Support	• Managing the clearinghouse/website. • Taking in funding from multiple sources to fund projects. • Developing activity proposals in collaboration with partners. • Assisting the lead in following up activities by partners. • Other tasks as requested.	UNEP Chemicals
Face to face meetings	Estimated once per year. All attempts will be made to host face to face meetings of the partnerships in the most cost effective way (e.g. back-to-back with other related meetings and have the ability to call in).	Japan, Ministry of the Environment hosts the meeting when the budget is available UNEP will support some limited travel of developing countries/NGOs in face to face meetings, rest is in-kind support from partners for their own travel.
Teleconferences	In case of necessity	Japan, Ministry of the Environment

IX. Linkages

The Waste Management Partnership Area will closely work with other Partnership Areas such as the following. In particular, close cooperation with the Mercury-Containing Products is expected, as that area is the upstream of the waste management issues.

- Mercury-Containing Products
- Artisanal and small scale gold mining
- Reductions from the Chlor-Alkali Sector
- Reduction of Mercury Release from Coal Combustion
- Supply and Storage

Possible collaboration areas with some of the Partnerships Areas include the followings:

<Mercury-Containing Products>

- Coordinate activities (e.g. input to and utilization of "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury" and "Good Practices for Management of Mercury Releases from Waste")
- Identify and design joint projects to meet objectives of the two Partnerships
- Enhance communication (e.g. attending meetings)

<Supply and Storage>

- Input to and usage of "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury" and "Good Practices for Management of Mercury Releases from Waste"
- Identification of gaps of two Partnerships

X. Partners

As of June 2013, there are 59 Partners in the Waste Management Partnership Area, consisting of 16 Governments, 4 International organizations, 25 NGOs, and 14 others[11].

Current partners of the Waste Management Partnership Area (as of April 2012)

Government:

- Burkina Faso
- Cambodia
- Cote d'Ivoire
- Georgia
- Germany
- Japan
- Liberia
- Malawi
- Mali
- Mexico
- Nigeria
- Philippines
- Senegal
- Syrian Arab Republic
- Tanzania
- United States of America

International Organizations:

- Secretariat of the Basel Convention
- UNEP
- UNIDO
- UNITAR

NGO:

[11] Here, the Government of Japan, as Lead of the Waste Management Partnership Area, and UNEP, which provides administrative support for the UNEP Global Mercury Partnership, are also counted as "Partners".

- AAMMA (Asociación Argentina de Médicos por el Medio Ambiente)
- Artisanal Gold Council
- Balifokus
- Ban Toxics
- Blacksmith Institute
- CREPD (Centre de Recherche et d'Education pour le Dèloppement)
- EDUCAF(Education for All in Africa)
- Environmental Health Council
- Alianza Contaminación Cero
- International Academy of Oral Medicine and Toxicology-Europe
- IFDEA (International Federation of Dental Educators and Association)
- International POPs Elimination Network (IPEN)
- International Society of Doctors for the Environment (ISDE)
- ISE-POPS-CI (Informer, Sensibiliser, Eduquer sur les Polluants Organiques Persistants en Cote d'Ivoire)
- International Commission on Geosciences for Environmental Management (GEM), a comission of the International Union of Geosciences (IUGS)
- New World Hope Organization (NHWO)
- Pollution Control Association of Liberia
- Pro-Biodiversity Conservationists in Uganda (PROBICOU)
- Safe Minds
- SETAC(Society of Environmental Toxicology and Chemistry)
- Uganda Network on Toxic Free Malaria Control (UNETMAC)
- World Dental Federation(FDI)
- World Medical Association(WMA)
- Zero Mercury Working Group
- Zoï Environment Association

Others:

- ARCADIS-US, Inc.
- Association of Lighting and Mercury Recyclers(ALMR)
- Cardno ENTRIX
- CETAC
- Department of Toxicology Faculty of Chemical Science and Pharmacy (University of San Carlos of Guatemala)
- Environmental Visual Artist Gabriela Batista
- Geological Survey of Denmark and Greenland
- GEOMIN
- Hg. Recoveries Pty. Ltd.
- Institute for Combustion Science and Environmental Technology (ICSET)
- International Association for Dental Research(IADR)
- International Dental Manufacturers(IDM)
- OIKON-Institute for Applied Ecology
- Peerless Green Initiatives