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UNEP Global Mercury Partnership

Overall progress of the United Nations Environment Programme Global Mercury Partnership from July 2010 to June 2012

UNEP Global Mercury Partnership Report on overall progress

July 2010 – June 2012

Introduction

The Operational Guidelines of the Overarching Framework of the UNEP Global Mercury Partnership specify that one of the responsibilities of the Partnership Advisory Group is to report on overall progress to the Executive Director. Related to this, UNEP is to facilitate reporting on progress to governments, including the UNEP Governing Council or its subsidiary bodies, as appropriate, and the partnership areas are to report biennially to UNEP in accordance with the UNEP reporting format.

Reporting is to include tracking of partnership activities and partner contributions as well as assessing effectiveness, and measuring the impact of partnership activities on the achievement of the overall goal. The reports are to enhance efficiency, effectiveness, and sustainability of the UNEP Global Mercury Partnership.

The first report on progress was prepared for the period of January 2009 to June 2010 and is available on UNEP's web-site.

This document is a report of overall progress of the UNEP Global Mercury Partnership for the period July 2010 to June 2012. It has been developed by UNEP and reflects input received from within the partnership areas.

A separate report on activities undertaken from July 2010 to June 2012 under the UNEP Global Mercury Partnership is available at:

http://www.unep.org/hazardoussubstances/Mercury/GlobalMercuryPartnership/PartnershipAdvisoryGroup/PAG4meetingdocs/tabid/104422/Default.aspx

Section I: Assessment of overall progress:

Membership

Overall interest in the UNEP Global Mercury Partnership is strong. The number of official partners is steadily growing:

- As of 1 July 2010, there were 70 official partners in the Global Mercury Partnership, including 15 governments, 4 intergovernmental organizations, 31 non-government organizations, and 20 others.
- As of 30 June 2012, there were 111 official partners in the Global Mercury Partnership, including 24 governments, 5 intergovernmental organizations, 44 nongovernment organizations, and 38 others.

Some of the partners are global associations that represent industry sectors or global civil society consortia. These represent a large number of national associations that extend the reach of the Partnership. In addition, the Partnership works with a number of stakeholders that have not yet officially joined.

Endeavouring to secure adequate funds

Financial support for the Partnership provided through UNEP is made available from

- (i) The Environment Fund;
- (ii) Voluntary unearmarked contributions to UNEP for its Programme of Work and subprogrammes;
- (iii) Voluntary extra budgetary contributions provided to UNEP for particular activities within the Programme of Work and subprogrammes;
- (iv) Funding mechanisms such as the SAICM QSP and the GEF.

Total financial support for the Partnership had amounted to about \$ 10.5 million provided through UNEP of which the Environment Fund provided about \$ 1.5 million; almost \$ 1 million from unearmarked contributions; almost \$ 6 million from extra budgetary contributions from a number of donors; and about \$2 million had been received from the GEF.

UNEP direct costs relating to the secretariat amount to about \$ 1 million per year, principally for staffing. Two professional staff members are supported by the Environment Fund, other staff from the voluntary contributions. The balance of about \$ 7.5 million had been made available for a variety of Partnership activities.

The figures above do not represent the total resources mobilized for the Partnership nor the breadth and balance of activities supported because only funding made available through UNEP was considered. Considerable funding continued to be available directly from other partners and donors but could not be included as there was no mechanism to gather and report on these sums.

UNEP had provided about 38% of its total project expenditure to work of the supply and storage partnership area – in particular for continuing work to assist Kyrgyzstan to move away from primary mercury mining, and to enhance capacity for mercury storage and disposal in Asia and Latin America. A further 21% of funding had been for work on mercury emissions from coal – particularly through the EU-funded USEPA-supported work with the International Energy Agency in China, Russia, South Africa and India. UNEP had provided about 10% of its total project expenditure to support the artisanal and small-scale gold mining partnership area – in particular building national strategic planning capacity, holding the Global Forum, and developing guidance and communications materials. In addition, smaller amounts had been provided to support work on products – in particular examining the economics of conversion and demonstration projects related to the phase down of dental amalgam; and to support work to reduce mercury use in vinyl chloride monomer production in China. UNEP is working with

GEF and two projects have been delivered and been approved by the GEF and a number are in development for submission during 2013.

About a quarter of total project expenditure had been used more generally to support assessments – in particular the so-called 'Paragraph 29 study' and the updating of the Global Mercury Assessment both requested by UNEP Governing Council in its decision 25/5; and to support the preparation of national inventories, including through the continued development of the UNEP mercury inventory toolkit.

Overview of the partnership areas

During the reporting period, business plans have been updated for the following seven partnership areas: artisanal and small-scale gold mining; mercury cell chlor-alkali production; mercury air transport and fate research; mercury in products; mercury releases from coal combustion; mercury waste management; and mercury supply and storage.

A new partnership area business plan has been developed for mercury releases from cement industry. The business plans provide clarity and accountability for partnership area efforts and timelines.

The current business plans for all the partnership areas are available on the UNEP Mercury Programme website. The partnership area leads and objectives are set out Annex 1 to the current document.

Summary of activities of the partnership areas

The partnership areas have identified objectives that are meant to reflect desired outcomes of the partnership area. It is difficult to assess the overall effectiveness of the partnership areas, in particular because there is a general lack of information available and lack of resources available for assessing. For example, without a robust field programme for the artisanal and small-scale gold mining partnership area it is not feasible (nor necessarily helpful at this stage) to be tracking detailed progress in this area.

A separate report on activities undertaken from July 2010 to June 2012 under the UNEP Global Mercury Partnership is available at:

http://www.unep.org/hazardoussubstances/Mercury/GlobalMercuryPartnership/PartnershipAdvisoryGroup/PAG4meetingdocs/tabid/104422/Default.aspx

Nevertheless to demonstrate the types of activities undertaken by the partnership areas, a short list of highlights of partnership activities undertaken from July 2010-June 2012 is provided in Table 2 below.

Table 2: Highlights of partnership area activities for July 2010-June 2012

Partnership area	Highlights of activities implemented	
Artisanal and small-scale gold mining	i)Global Forum on ASGM, 7-9 December 2010 in Manila, Philippines, to discuss and formulate pragmatic options for policy and decision makers to consider the development of the UNEP mercury treaty was convened in December 2010. Some 100 participants, representing 17 Governments and number of intergovernmental and non-governmental organizations, attend the forum. It is believed that the Forum has helped to support constructive negotiations on this topic throughout the intergovernmental negotiation process.	
	 ii) Development of the following three key documents, namely: Reducing Mercury Use in Artisanal and Small Scale Gold Mining: A Practical Guide; A revised version of the Guidance Document on developing a National Strategic Plan. This document is in English, Spanish and 	

French;

- iii. Analysis of formalization approaches in the artisanal and small-scale gold mining sector.
- iii) The Mercury Watch Database (www.mercurywatch.org), a project of the Artisanal Gold Council (AGC), is dedicated to collecting, analyzing, and disseminating information needs about mercury use and emissions around the world in ASGM. The website is the only global data-base and includes up to date current inventory information including estimated number of miners, mercury use and ASGM gold produced in a country.

iv)An increase in field projects since the previous reporting cycle indicates increased level of interest and will to contribute to results.

Mercury cell chloralkali production

- i) In 2010-2011, the Partnership compiled a comprehensive inventory of mercury-cell facilities throughout the world that was presented as a meeting document at INC2. This inventory helps identify countries and organizations that could benefit from technical exchanges.
- ii) Draft paper on the economics of conversion of mercury-cell chlor-alkali facilities to non-mercury technology.
- iii) Project that assesses the applicability of WCC guidance on best practices for chlor-alkali facilities in Uruguay.

Mercury air transport and fate research

- i) Cooperation with the Task Force on Hemispheric Transport of Air Pollution (TF HTAP) of United Nations Economic Commission for Europe Convention on Long-range Transboundary Air Pollution (UNECE-CLRTAP) in developing the 2010 Report "Part-B: Mercury." This Report was released in July 2010 has been provided as input to the preparation of the report for the Paragraph 29 study.
- ii) Partners were involved in several special sessions of the 10th International Conference on Mercury as a Global Pollutant (ICMGP), held in Halifax, Nova Scotia, Canada in 2011.
- iii) The Partnership area is actively involved in a 5-year research project (2010-2015) funded by the European Commission aiming to build a Global Mercury Observation System (GMOS). GMOS will support the evaluation of the effectiveness of international control measures on mercury in the future.

Mercury in products

- i)"Economics of Conversion" case studies of two firms involved in the transitioning from mercury-added to mercury-free products (medical devices and button cell batteries) in the EU and United States. The studies reveal that transitioning to mercury free products is feasible with favourable return of investment provided there is the appropriate regulatory or legislative framework and increased market demand.
- ii) Completion of a multi-year initiative to develop products/emissions inventories and risk management plans in Latin America (Chile, Ecuador, and Peru), Asia (Mongolia), and Africa (South Africa) currently being implemented.
- iii) Demonstration that mercury-free devices are safe, cost-effective, accurate, efficient, and available to support introduction/use in health care settings in Nepal and Tanzania.
- iv) Provision of technical support to the GEF "en. lighten project" advocating for low mercury content in compact fluorescent lamps while transforming the market to efficient lighting.
- v) Publication of the "Future use of Materials for Dental Restoration", report of a meeting convened by WHO and supported by UNEP in 2009. The meeting recommended a planned approach in the phase down of dental amalgam.

Mercury releases from coal combustion

- i)A Process Optimisation Guidance (POG) prepared for mercury control at coal-fired facilities outlining how changes in plant performance and efficiency can reduce emissions of all pollutants in an effective and economic manner, as well as promoting technologies to reduce emissions of other pollutants such as particulates, SO2, and NOx since many of these technologies provide co-benefit reduction of mercury. The POG is available in English, Russian, and Mandarin from both the UNEP and IEA Clean Coal Centre websites. Furthermore, an interactive calculation tool (iPOG) based on the POG has been developed, that allows users to provide coal and plant specific data to study mercury behavior on a plant-by-plant basis. The iPOG is available as a free download via the Coal Partnership and IEA CCC webpages.
- iii)As part of the project "Reducing mercury emissions from coal combustion in the energy sector":
- a) A study evaluating the mercury contents of coals in China and to estimate current and future emissions from the coal utility sector has been developed. Similar studies have been produced in South Africa and Russia. The reports are available from the UNEP Coal Partnership website.
- b) Two projects demonstrating mercury reduction at two coal-fired power plants are being implemented in Russia. The work will be completed soon and the final reports will be made available on the UNEP Coal Partnership website.

Mercury waste management

- i) Preparation of a "Resource Person List" that will provide technical expertise and guidance on activities that will reduce mercury releases from waste.
- ii) Provision of assistance in the finalization of the "Basel Convention Technical Guidelines on Environmentally Sound Management of Wastes Consisting of Elemental Mercury and Wastes Containing and Contaminated with Mercury" which was adopted at the tenth meeting of the Conference of Parties of the Basel Convention in October 2011.
- iii) Preparation of Good Practices for Management of Mercury Releases from Waste (Good Practices Document).

	iv) Implementation of waste and storage projects in 3 settings: industry (guidance for on-site storage of elemental mercury for the chlor alkali sector in Uruguay), household or municipal (brochure on environmentally sound management of waste in China), and the health care setting (video on handling mercury spills)
Mercury supply and storage	i) Kyrgyz Republic Mercury Mining Phase Out Project: Small grants project promoting alternative to primary mercury mining Phase II completed with UNDP. Technical Feasibility study conducted. Proposals developed which attracted additional funds.
	ii) Workshop on Mercury Management in the Latin American and Caribbean Region (LAC). Governments of Spain, Brazil and Uruguay organized a workshop on mercury management in the LAC Region, 21-22 May 2012. The workshop stressed the relevance of adequate regulatory frameworks, technological innovation, and industry responsibility in the management of its own excess mercury.
	iii) Mercury Regional Storage projects: The projects were successfully brought to a close in July 2011 providing assessment reports on projected excess mercury supply in Asia Pacific and Latin America, and studies on various options which governments could use in the management of their excess supply
	iv) Mercury Storage and Disposal project in Argentina and Uruguay was completed in April 2012 and provided a better understanding of mercury and mercury waste issues at country level. The project resulted in national action plans as basis to promote the environmentally sound management of excess or surplus mercury.
Mercury releases from the cement	The Cement Sustainability Initiative (CSI), a group formed under the auspices of the World Business Council for Sustainable Development (WBCSD), is co-chairing the new partnership area to reduce global emissions of mercury from the cement industry.
industry (newly established in November 2011)	The partnership area has drafted a Business Plan that outlines cost-effective approaches that the partnership area will undertake in order to achieve reduction in mercury emissions. The business plan addresses issues such as the establishment of global mercury inventories, development of techniques to reduce mercury emissions into the environment, and outreach efforts to raise awareness within the industry.
	The Partnership is currently soliciting members to join and participate in various projects including demonstration projects to prove the feasibility of abatement techniques.

Section II: Encouraging partnership areas in moving forward and assessing effectiveness of the overall UNEP Global Mercury Partnership

A number of areas for improvement have been identified and partially addressed throughout this reporting cycle. While there is room for improvement, this section attempts to elaborate upon some of the developments noted in Table 3 below.

Table 3: Efforts to improve effectiveness of the overall Global Mercury Partnership

Area for improvement Actions taken				
1) Communication	A communication strategy was developed for the Global Mercury Partnership and a number of low-cost actions have been implemented as a result. Nevertheless, there is a general lack of funding capacity to improve Partnership communications.			
i) There is a need to better communicate progress of the Partnership and further recruit key countries/stakeholders, to expand the sphere of influence of the partnership areas.	Partnership Story of the Month was initiated in January 2012 and has been undertaken on a monthly basis since. It is distributed to all partners and mercury networks for information. Although it is difficult to assess its impact overall, it consistently generates questions and offers of additional support for the Partnership. It was suggested to compile a list of environmental journals and include them on the distribution list for the 'Story of the Month'.			
ii) Encourage partnership areas to continue to use the web-site for continued and increased outreach to partners and stakeholders	This is undertaken on an ad hoc basis given the limited availability of resources. It has been noted that UNEP should support the continuing development and maintenance of the Partnership website, which is emerging as a platform for effective information sharing amongst partners. UNEP worked with GRID-Arendal to develop a publication on mercury, called 'Mercury: Time to Act' which provides brief and latest background information on mercury. The Partnership 'Story of the Month', since January 2012, are compiled on the web site.			
iii) There have been some difficulties with telecommunications platform serving the partnership areas. This problem needs to be addressed to support better engagement of developing countries in the Partnership.	This issue has been explored but no action has been taken to solve it over the long term. The ASGM partnership area has started to do regular email updates to partners as it was seen as a more reliable approach to reach all partners. The email group (with a single email address) used by ASGM partnership had proved successful and gradually members are posting information and exchanging different ideas. Although internet access in some developing countries can prove to be a barrier.			
	A webinar was hosted by UNEP for the release of the document 'Reducing mercury use in artisanal and small-scale gold mining: a practical guide' in June 2012. The participants welcomed the initiative and webinar was recognized as an important tool, which might be considered for future communications.			

2) Promoting efficiency: utilize existing meetings for outreach as appropriate.	Regional consultations prior to INC meetings were used as a venue for disseminating technical information on specific partnership areas. In response to requests made by GRULAC and the Asia Pacific region, technical input was made on mercury storage and disposal at their respective regional consultations in September 2011. An additional presentation on the UNEP Global Mercury Partnership was also made at the Asia Pacific regional consultation in Japan.
3) Prepare and provide	The third and fourth meeting of the Partnership Advisory Group was conducted immediately following INC3 in Nairobi in November 2011 and the International Conference on Heavy Metals in the Environment (ICHMET) in Rome in 2012, respectively. Inventories prepared by the ASGM and chlor alkali
information to support decision-making and negotiations.	partnership areas are examples of where the partnership areas contributed information to the INC process in January 2011. In addition, the Guidance Document on Preparing a national strategic plan for ASGM is directly supportive of probable future obligations under the mercury treaty.
	The Process Optimisation Guidance (POG) prepared for mercury control at coal-fired facilities outlining how changes in plant performance and efficiency can reduce emissions as well as promoting technologies to reduce emissions of other pollutants such as particulates.
	In addition, the technical briefings hosted by the Partnership have provided valuable information on key topics at the INC sessions.
4) Partnership area leadership: It was suggested that the partnership areas could consider co-leads in order to provide	The ASGM partnership area was noted as a model for expanded capacity with a co-leadership model, of an intergovernmental organization and a non-government organization.
more balance to their overall leadership capacity in the future.	The Governments of Uruguay and Spain accepted coleadership of the Supply & Storage partnership area in November 2011.
	All other partnership areas currently have only one designated lead.
5) Fundraising	Additional funding is required to implement activities under the UNEP Global Mercury Partnership in line with priority actions established in the partnership area business plans.
	There has been some discussion of assembling a "wish list" of projects that could be made available to potential donors.

Meeting the overall objective of the partnership, next steps

Below, the Partnership Advisory Group reviews the objectives, targets and timelines established in each of the partnership area business plans with the aim of encouraging the work of the partnership areas in moving forward, consistent with the overall goal and operational guidelines of the Partnership.

For the artisanal and small-scale gold mining partnership area:

As the partnership continues to build up its portfolio, areas of priority for the next reporting period will be the development and implementation of projects aiming at (i) obtaining a more accurate picture of the extent of the issue, (ii) assisting countries in the development of their Action Plan to reduce the use of mercury in the sector and (iii) continuing the dissemination of low/non mercury techniques. Also, the broadening of the donor base should be seen as a priority.

UNEP is planning to conduct a second Global Forum on reducing mercury use in Artisanal and Small Scale Gold Mining in Latin America. The forum will review the challenges and opportunities surrounding the topic; discuss technical and formalization guidance that could play a role in addressing artisanal and small-scale gold mining issues and discuss national strategic planning approaches to reducing mercury use in the sector among other issues.

A third GEF project is currently under preparation, under the coordination of UNIDO, for the Philippines and Indonesia with strong involvement of our partners in the respective countries: Ban Toxics and the Blacksmith Institute. The project will aim to build upon the successes in mercury reduction achieved by the partners in the two countries.

Inventory work: A project will be initiated, supported by the Government of Norway, to enhance local capacity in Africa and Latin-America to implement ASGM mercury reduction activities and to engage local experience to adapt and improve mercury inventory tools facilitating more effective support to the ASGM sector. In this project, existing tools for capacity building will be adapted and tested for ASGM, in particular the mercury inventory toolkit. In addition, training partners will be identified to support local capacity building for ASGM and training capacity will be promoted.

The Geological Service of Denmark (GEUS) will be engaging in several ASGM related projects in the next year, including: an ASM-Fair in Dar es salaam (with the Ministry of Mines, Tanzania).

For the mercury cell chlor-alkali production partnership area:

The partnership area will continue its information sharing efforts in the areas of technical cooperation for mercury use and release reduction and on conversions (including storage, management, and financing). In particular, the partnership area plans to forge greater links with the Supply and Storage Partnership Area with a view towards, among other things, facilitating access to information on environmentally sound storage options for those facilities that plan to close or convert in the future. The partnership area will also work within the context of efforts underway to update and improve the global inventory of mercury-cell chloralkali facilities.

For the mercury air transport and fate research partnership area:

Mercury air transport and fate partnership was involved in several international conferences, including the International Conference on Heavy Metals in the Environment held in Rome - Italy, in September 2012 and are planning to attend the 11th International Conference on Mercury as a Global Pollutant to be held in Edinburgh, UK in July 2013.

The partnership plans on enhancing the development of the globally coordinated mercury multimedia observation system (GMOS) to monitor the concentrations of mercury species in various media, e.g., the air and water ecosystems and improving linkages with other air-emissions-related partnership areas.

UNEP, through a project funded by the GEF, will work with China to strengthen capacity for identification of mercury sources and priority actions to address mercury issues under a future global convention.

UNEP will support the development of national inventories, using the Toolkit for identification and quantification of mercury releases. The Toolkit is being revised and updated, taking into account the latest relevant scientific knowledge. Inventories will increase knowledge at the national level of the situation related to mercury emissions, assisting Governments in developing strategies or action plans to manage their mercury issues. Funding provided through these projects will also be used to leverage funding through other financial mechanisms, in particular the Global Environment Facility.

An update of the assessment of atmospheric emissions of mercury, as was requested by the Governing Council of UNEP at its 25th session, will be undertaken by UNEP. The update will draw on existing and new peer reviewed documents as well as other available information. The work will involve experts from all regions to collect new information on from countries and to ensure a wide ownership of the assessment. The partnership has been involved in developing parts of this report.

For the mercury-containing products partnership area:

Ongoing projects include:

- Demonstration of dental amalgam phase down in East Africa (Kenya, Tanzania, and Uganda). Activities include awareness raising on dental restorative materials, Africa dental amalgam trade study, and on-site demonstration on the environmentally sound management of dental amalgam waste.
- A multi-year initiative to expand existing and launch new health care mercury inventory, reduction, waste management, and training pilots in Latin America (Brazil, Costa Rica, Ecuador, Mexico).
- Development of study examples where countries have phased down the use of dental amalgam, including the prevalent trends, variations and commonalities.

For the mercury releases from coal combustion partnership area:

A mercury reduction demonstration in South Africa will be initiated by the end of 2012 as part of the project "Reducing mercury emissions from coal combustion in the energy sector," with funds from the European Commission and a cost of about 125,000 USD.

A study of the coal-fired power sector has been conducted in India, including an inventory of mercury emissions from the sector. A mercury reduction demonstration is planned commence soon.

In addition, the Partnership is actively seeking new members from South Asia and Southeast Asia with a view to help with inventory work and demonstration projects in these countries. US Department of State has contributed \$150,000 to work in India, Cambodia, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam. This will be used to help improve mercury emission inventories in these regions and, if possible, demonstration projects for mercury reduction at typical coal-fired facilities in the target countries.

For the mercury waste management partnership area:

To promote environmentally sound collection, disposal and treatment techniques for mercury waste following a lifecycle management approach through the development, dissemination and implementation of the Basel Convention Technical Guidelines, including possible further collaboration with other Partnership Areas.

The partnership will continue to encourage country level waste projects using the Basel convention technical guidelines. Project objectives will be a) To identify environmentally sound collection, transportation, disposal and treatment techniques for mercury waste 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, interests and needs. And c) Promote awareness and education on mercury waste.

Resources available will be utilized in particular for a) the Resource Person List to obtain specific advice for mercury waste management b) the draft Good Practice Document to provide information about feasible solutions to deal with collected waste products and treated residues containing mercury and the c) Mailing-List that has been set up to promote increased interactions among partners.

For the mercury supply and storage partnership area:

The Partnership are is encouraging linkages with the chlor-alkali partnership to gather data on estimated quantities of surplus mercury worldwide projected to be available in the near future. The chlor alkali sector is the largest source of surplus mercury from the decommissioned chlor alkali cells. It is also developing industry sector plans for the storage of mercury from chlor-alkali plants, non-ferrous metal processing, and oil/gas production. The Partnership area is helping in

- Development of storage protocols for the different types of wastes;
- Working with the relevant industry sectors, governments, and other interested stakeholders to determine how much mercury will become available from decommission of mercury chloralkali plants; and the quantity of by-product mercury generated from non-ferrous metal processing, gold mining and oil/gas production;
- Facilitating the implementation of export ban legislation in additional countries or regions by investigating current regulatory framework on mercury trade, demand and supply.
- Encouraging regional workshops on mercury storage and disposal similar to the GRULAC experience.

The Kyrgyz Republic has renewed momentum. The next phase of the project focuses on reduction of most immediate threats posed by the mine site to the environment and people, promotion of investment in other economic development activities and local alternative employment in the region. The Government of Norway granted 850,000 US\$ of new funding in November 2011 to the project. With these funds as the major source of co-finance, the Global Environment Facility (GEF) approved a medium size proposal of \$1 million in July 2012.

For the mercury from cement partnership area:

The Cement Partnership is still in its organization phase and a business plan has been developed, partners from governments, industry, and NGOs are being sought.

The goal of the cement area partnership is to make significant reductions of mercury emissions from the cement sector. By gathering better data on mercury emissions from the sector, the partnership seeks to enhance the understanding of the normal range of emissions that may occur in various regions around the world. Experience in Europe and North America has shown that the majority of emissions from the sector are generated by a relatively small number of high emitters. Through development of best management practices and control technologies, the cement area partnership will be able to make recommendations on how best to lower the emissions from this group of high emitting plants. Specifically, control technologies that the Partnership wishes to investigate include wet scrubbers, absorption technologies, dust shuttling while including Continuous Emission Monitoring (CEMs).

Other areas:

Gaps in knowledge have been identified, in particular on releases from some sectors such as production of Vinyl Chloride Monomer, emission from oil and gas production and refining, secondary metal production, manganese production and dental uses. Also there is a need by countries to produce reliable national release estimates, and provide transparency in methods used.

Future of the Partnership

Noting the important role that the Partnership continues to play not only in advancing immediate actions to reduce mercury releases and exposure risks but also in providing good practices and practical experience of value in the treaty negotiations, the Partnership Advisory Group at its 4th session considered the role of the partnership after the signing of the treaty. There was broad consensus that the Partnership could continue to play an important role in efforts to reduce mercury releases and exposure risks, supporting the Convention, its Parties and other stakeholders as they strove to meet their obligations under the treaty. The potential role of the Partnership in developing and updating inventories; preparing guidance documents; researching, demonstrating and promoting techniques to reduce mercury use and release; and supporting and enhancing the performance capabilities of Parties and other stakeholders through capacity building, was cited as important for the cost-effective implementation of the treaty.

Annex Summary of the partnership area leads and objectives

Partnership area	Partnership area leads	Partnership area objective
Artisanal and small-scale gold mining	United Nations Industrial Development Organization (UNIDO), Natural Resources Defense Council (NRDC)	Continued reduction and elimination of mercury uses and releases in artisanal and small-scale gold mining. The partnership area has set a target of a 50 per cent reduction in mercury demand in artisanal and small-scale gold mining by the year 2017.
Mercury cell chlor- alkali production	United States Environmental Protection Agency	To minimize and, where feasible, eliminate global mercury releases to air, water and land that may occur from chloralkali production facilities. The partnership promotes a target of reduction in mercury demand to 250 tonnes by 2015.
Mercury air transport and fate research	National Research Council Institute for Atmospheric Pollution Research, Italy	To increase global understanding of international mercury emissions sources, fate and transport by accelerating the development of sound scientific information to address uncertainties and data gaps in global mercury cycling and its patterns; by enhancing information sharing among scientists and between them and policymakers; and by providing technical assistance and training. Considering the importance of an integrated evaluation of mercury impacts on the whole environment, the scope of the Partnership's research activities has been extended to include aquatic transport and fate of methylmercury to biota as well as human exposure.
Mercury in products	United States Environmental Protection Agency	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 procedures.
Mercury releases from coal combustion	International Energy Agency (IEA) Clean Coal Centre	Continued minimization and elimination of mercury releases from coal combustion where possible.
Mercury waste management	Government of Japan	To minimize and, where feasible, eliminate unintentional mercury releases to air, water, and land from waste containing mercury and mercury compounds by following a life cycle management approach.
Mercury supply and	Governments of Spain and Uruguay took over in November	To minimize and where feasible, eliminate mercury supply considering a hierarchy of

storage	2011 from the Mercury Policy Project.	sources, and the retirement of mercury from the market to environmentally sound management.
Mercury releases from the cement industry (newly established in November 2011)	Cement Sustainability Initiative (CSI), of the World Business Council for Sustainable Development (WBCSD)	To minimize mercury releases to the environment from cement manufacture.