

IFCS Side-event on heavy metals
23 September 2006 Budapest, Hungary

UNEP Mercury (Hg) Programme Lead (Pb) and Cadmium (Cd) Initiatives/Activities

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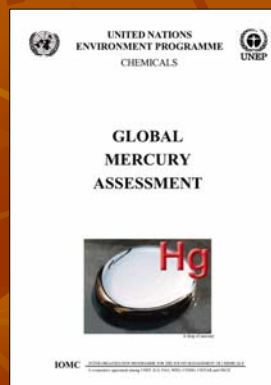
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Why a global assessment of Hg*?

- Initiated by UNEP Governing Council in February 2001 (21st session)
- Responded to concerns raised in different fora that national/regional action not sufficient to address Hg pollution

* Hg = mercury



Global Mercury Assessment Key findings- global cycling

- Hg is persistent and cycles globally – emissions in any continent can contribute to deposition in others thus an international issue
- Due to long-range transport, even nations with minimal Hg releases, and other areas remote from industrial activity, may be adversely affected.



Coal-fired power plant

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Key findings – impacts on health and environment of global concern

- Studies from numerous geographic areas indicate a significant portion of humans and wildlife throughout the world are exposed to methyl-Hg levels of concern
- Many humans/wildlife across the globe are at risk, largely due to consumption of contaminated fish



Tuna fishing in the Mediterranean

Key findings – growing problem in developing countries

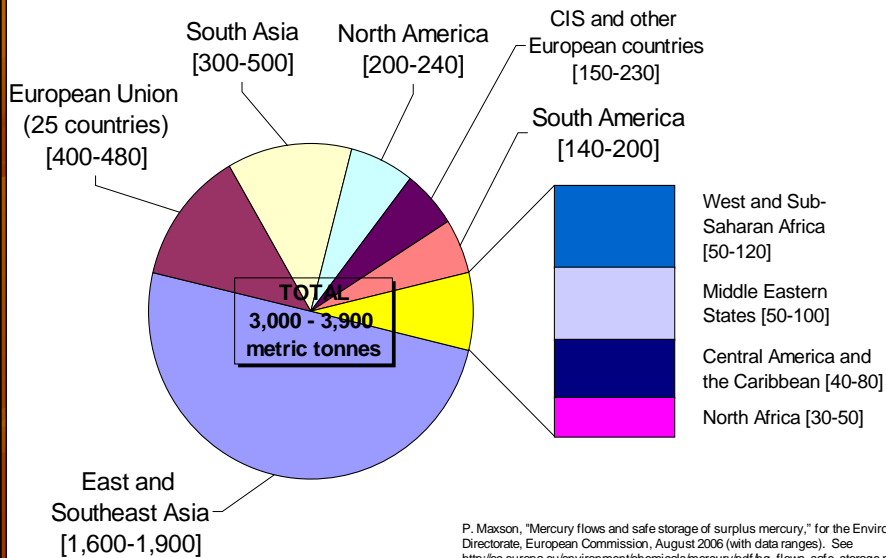
- Hg may be more problematic to less-developed regions (growing energy demand, poor waste treatment facilities, artisanal gold mining activity, etc.)
- Uses being phased out in developed countries may still be ongoing in developing countries

UNIDO



Using liquid Hg to amalgamate gold

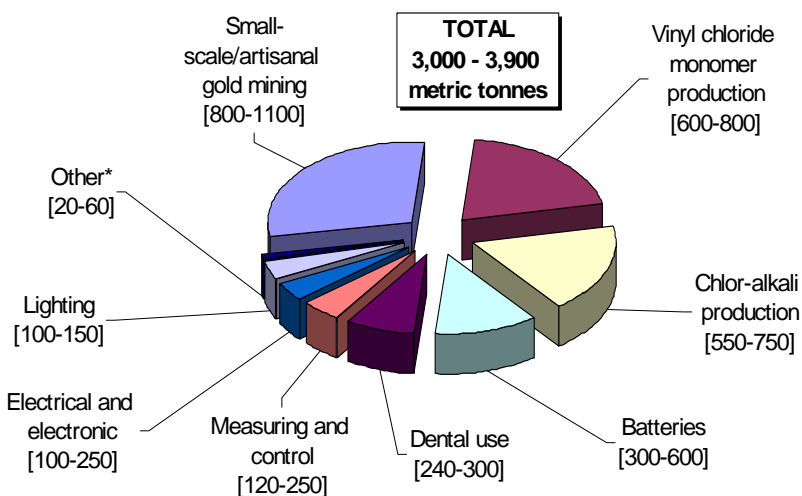
Mercury demand by region - 2005 (metric tonnes)



P. Maxson, "Mercury flows and safe storage of surplus mercury," for the Environment Directorate, European Commission, August 2006 (with data ranges). See http://ec.europa.eu/environment/chemicals/mercury/pdf/hg_flows_safe_storage.pdf



Global mercury demand by use, 2005 (metric tonnes)



* Laboratory, pharmaceutical, cosmetic, cultural/traditional uses, etc.

P. Maxson, "Mercury flows and safe storage of surplus mercury," for the Environment Directorate, European Commission, August 2006 (with data ranges). See http://ec.europa.eu/environment/chemicals/mercury/pdf/hg_flows_safe_storage.pdf

Conclusion – sufficient basis for international action



- Sufficient evidence of significant global adverse impacts from Hg to warrant further international action
- Better understanding important, however, not necessary with full consensus on all aspects or complete evidence in order to start initiating action globally
- Outline of possible options for addressing problems – covering short, medium and long-term goals



Decision 2003 Need for global policy response

The Governing Council

- Endorsed conclusions of the Working Group
- Decided (GC 22/4) national, regional and global actions should be initiated ASAP



UNEP Headquarters Nairobi

- Urged all countries to adopt goals and take actions to identify exposed populations and reduce anthropogenic Hg releases

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Establishment of a UNEP Mercury Programme

- To support efforts of countries to take action to reduce Hg pollution, the Governing Council requested UNEP to initiate technical assistance and capacity building activities to support the efforts of countries.
- In response, UNEP established a mercury programme within its Chemicals Branch in Geneva, Switzerland.



United Nations, Geneva

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UNEP Mercury Programme -



Main elements of the programme include:

- Assisting countries to understand and address Hg problems, through
 - Building inventories of uses and releases
 - Identifying populations at risk
 - Developing communication and outreach to at-risk populations
 - Initiating actions to reduce uses and releases of Hg, including promoting Hg-free products, technologies and processes, using environmentally friendly alternatives

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UNEP Mercury Programme - Building capacity



- 7 awareness raising workshops in 2004/05
- Establish and maintain an information clearing-house
- Produce/obtain guidance materials for

- Developing inventories of Hg releases
- Identifying populations at risk
- Communication/outreach to populations at risk
- Options/approaches to reduce Hg releases



UNEP Workshop, Trinidad

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Governing Council 2005



- **GC 23/9** omnibus decision on sound **chemicals management**
- Synergies among Conventions (Montreal, Basel, Rotterdam, Stockholm) and the Chemicals Branch of UNEP
- Bali Strategic Plan for Technology Support and Capacity Building
- Strategic Approach to International Chemicals Management (SAICM)

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GC 23/9 : Strengthened the UNEP Mercury Programme



- Reiterated the conclusions of the GMA report on the global adverse impacts of Hg on health and environment
- Reiterated its decision that national, regional and global actions should be initiated ASAP
- Urged all countries to adopt goals and take actions to identify exposed populations and reduce anthropogenic Hg releases



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UNEP Mercury Programme - Mercury partnerships



- Implement partnerships between Governments, IGOs, NGOs and private sector, in a clear, transparent and accountable manner, as one approach to reducing risks to human health and environment from Hg;
- UNEP will work with Governments/ stakeholders to compile and report needs identified to execute partnerships and assist in mobilization of resources in support of the partnerships



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UNEP Mercury Programme - Mercury partnerships



US has been especially active in initiating partnerships, involving a number of countries and stakeholders:

- Hg reduction in the chlor-alkali sector
- Hg reduction in products;
- Hg management in artisanal/small-scale gold mining;
- Hg control from coal combustion; and
- Hg air transport and fate research.

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Partnership with an NGO- Health Care Without Harm (HCWH)



- Organized Conference on Alternatives to Mercury in Health Care in the SE Asia region January 2006 (Manila) and in the ROLAC region last August 2006 (Buenos Aires)
- To build capacity and develop strategies to reduce and eliminate Hg use in the health care sector
- Pilot project in Buenos Aires hospitals: promote non use of Hg such as procurement of Hg free equipments and drafting of hospital purchasing policy



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Reporting on Partnership activities (GC 2007 submission):



- Goals and objectives of the partnership
- Process and timeline
- Roles and responsibilities of partners
- Mechanism for effective monitoring and evaluation
- Consultations held
- Progress and results obtained
- Constraints encountered and lessons learned
- Technical and financial resources
- Resource mobilization and fund raising activities
- Views and input for future successful approaches

<http://www.chem.unep.ch/mercury/partnerships>

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UNEP Mercury Programme - Facilitating national action



- Encourage and support development of national and regional action plans to address Hg pollution
- Mobilize technical and financial resources to support national, regional and global efforts and capacity-building
 - possible small grants programme (USD 50,000)
 - priorities, sample project proposal

<http://www.chem.unep.ch/mercury/support.htm>

<http://www.chem.unep.ch/saicm/qsp.htm>

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Priority areas for technical assistance and capacity building activities to support developing countries and CEIT



- Development of national inventories
- Enhanced risk communication to at risk populations
- Public awareness and promotion of Hg free products, technologies, processes
- Application and sharing on BAT, BEP
- Reduction of risk of exposure to Hg in products, and production processes
- Environmentally sound waste management
- Developing national implementation plans
- Conducting training and workshops
- Improving the global understanding of international Hg emission sources, fate, and transport

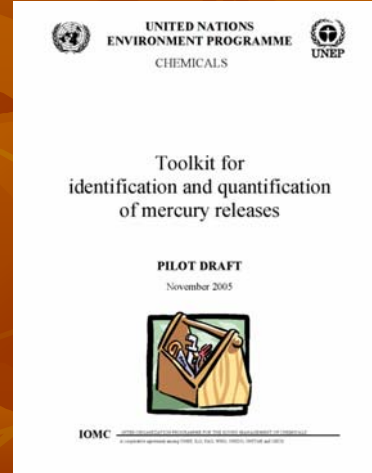
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UNEP Guidance Document - Toolkit for Inventory Development



- Completed in Nov 2005
- Translations in other UN languages
- Pilot testing at national level with selected countries

<http://www.chem.unep.ch/mercury/toolkit/default.htm>



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UNEP Toolkit for Inventory Development will provide:



- Summary of release pathways & source types
- Guidance on how to develop an inventory, focused on a stepwise approach:
 - from gathering simple qualitative information to developing a detailed quantitative inventory
- Detailed descriptions of source categories, including example data, input factors, and output distribution factors
 - to be supplemented as experience is gained

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UNEP Mercury Programme - Need for further actions



- Support and facilitate discussion of need for further actions to address Hg pollution
- Develop report summarizing supply, trade and demand information for Hg, to be published in October 2006, for consideration by the Governing Council in February 2007
- Report on progress, including within partnership activities

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Guidance document with WHO/FAO/JECFA



- communicate risks to vulnerable groups
- Identify populations at risk due to Hg exposure
- Awaiting work on recommended safe threshold levels of exposure to Hg



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UNEP –Other heavy metals activities Lead and Cadmium



- UNEP GC Decision 21/5 in 2001 discussed the need for assessment of other heavy metals, such as *lead* (Pb) and *cadmium* (Cd) which could be of global concern
- GC Decision 22/4 V on mercury programme in 2003 decided to consider further action on other metals such as lead and cadmium
- GC Decision 23/9 III on Pb and Cd in 2005, requested UNEP to develop reviews of scientific information on these 2 metals, focusing on issue of long-range environmental transport

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Scientific review approach- Transparent process with large ownership in key findings



- Called for submissions from Governments, IGOs, NGOs and industry
- Established an open-ended working group to review and finalize report
- Working Group meeting: Finalize the reviews and draw key findings on Pb and Cd :information on long range environmental transport, sources of emissions and releases, information gaps, properties which may be of global relevance, human populations and ecosystems at risk, and magnitude of threat

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First Working Group Meeting on Lead and Cadmium Scientific Reviews, 18-22 September 2006, Geneva



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Lead and cadmium review



- Considered to be a useful summary of current science and other topics relevant to lead and cadmium
- Includes chemistry, major sources and releases of Pb and Cd in the environment, use patterns, human exposure and health effects, impacts on environment, production, use and trade patterns, long range transport in the environment, initiatives for preventing and controlling releases and limiting exposures, data and information gaps
- Working group conclusions will be presented to the GC in February 2007 for consideration

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Further information
can be found at:



<http://www.chem.unep.ch/mercury/>



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[http://www.chem.unep.ch/Pb and C](http://www.chem.unep.ch/Pb_and_C)



United Nations Environment Programme
Chemicals

Lead and Cadmium Activities

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In closing -



- This side event, organized by the Swiss government for the IFCS V, is an excellent example of the spirit of the Governing Council's decision to promote partnerships and collaborative efforts as an efficient approach to obtaining reductions in heavy metals emission and releases

