

Mercury Partnership Areas

**Other than:
Products, Waste, Supply and Storage**

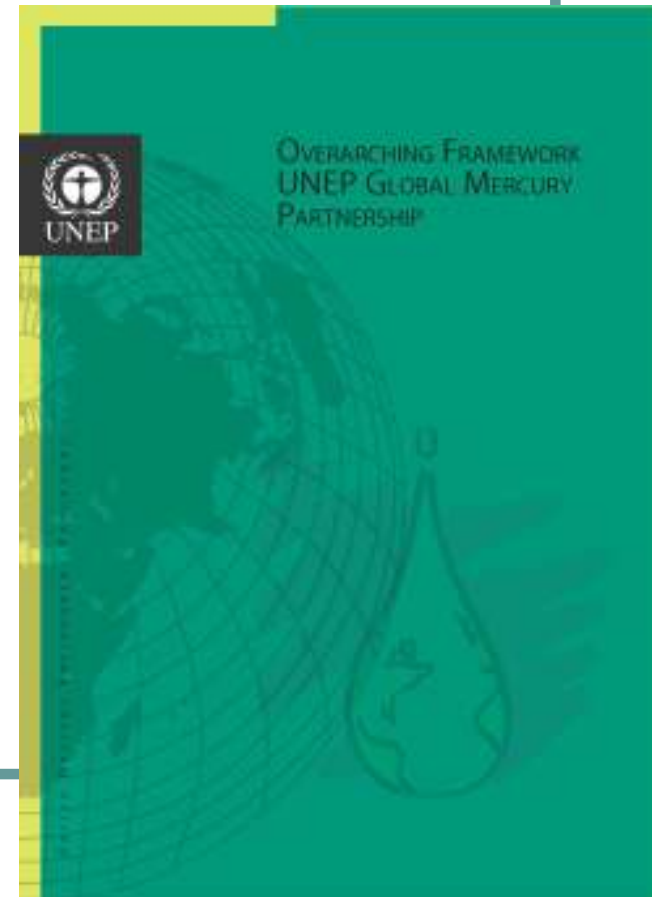
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Presently 7 Partnership Areas

1. Artisanal/small-scale gold mining
2. Coal combustion
3. Chlor-alkali sector
4. Air transport and fate research
5. Reduction in products
6. Waste management
7. Supply and storage

Other possible areas:

- cement production
- non-ferrous metals mining



Summary of Global Hg Partnership

- Overarching Framework was launched in 2008.
 - Identifies objective, priority actions, an advisory group as well as overall operational guidelines.
- Currently 46 official partners, UNEP is Secretariat.
- Projects focused on minimization and where possible elimination of mercury use and releases.
- Generating important information for the treaty negotiation process, such as technical guidance documents and awareness raising materials.

Chloralkali sector

- The objective of this partnership area is to significantly minimize and where feasible eliminate global mercury releases to air, water, and land that may occur from chlor-alkali production facilities;
- Use and emission trends going down due to phase out of mercury use;
- Issue is storage of excess mercury from existing plants.

Chloralkali in 2008

Mercury consumption and emissions from chloralkali plants
(kg per year)

Source: World Chlorine Council (2009)

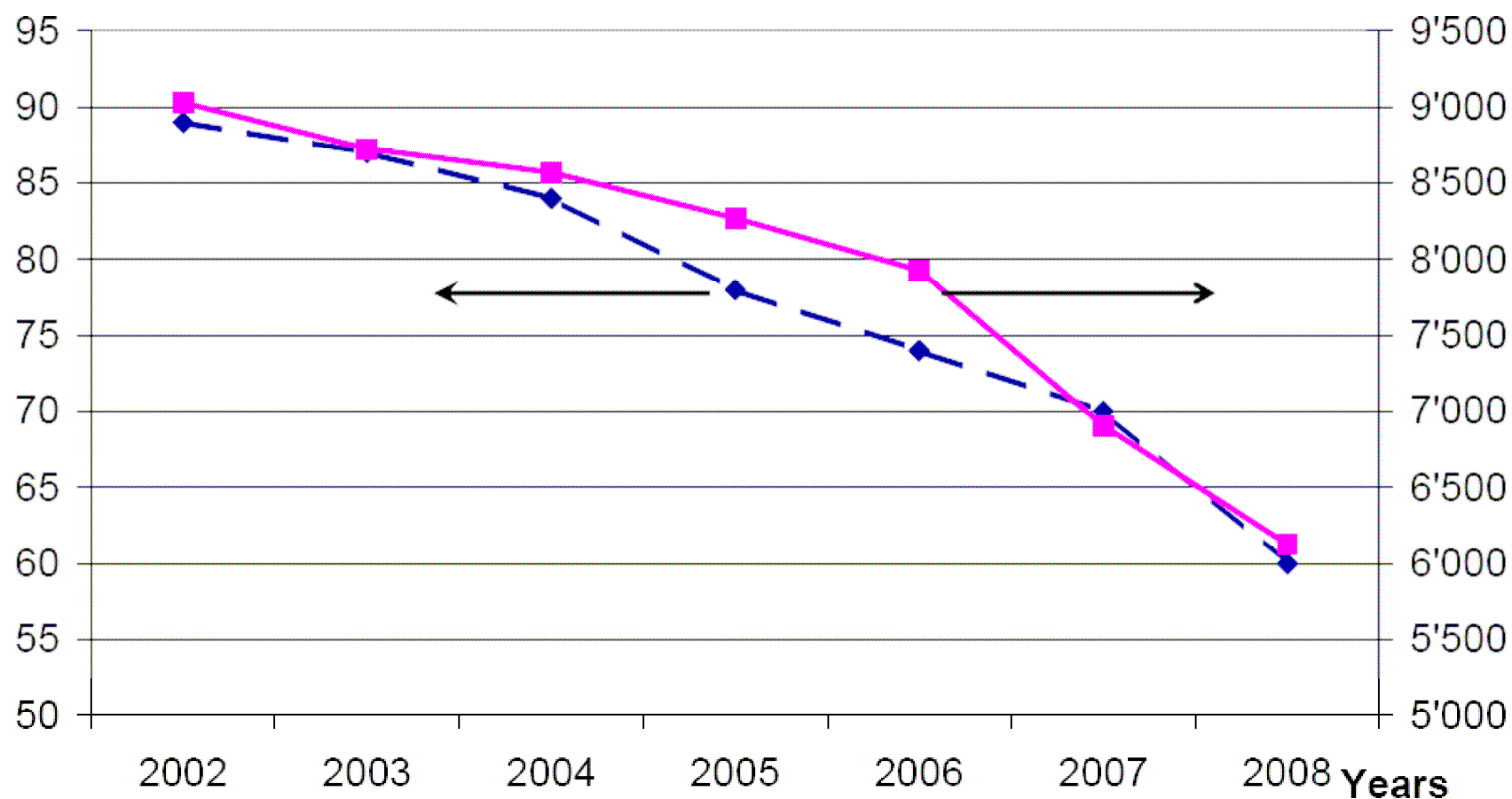
Production year: 2008									
Country or Area	Hg plants	Capacity	Purchases /Sales	Consumption /Use	Emission to products	Emission to water	Emission to air	Total emissions	Solid waste
	Number	In 1000 t Cl ₂ /y	kg Hg /y (- if sold)	kg Hg /y	kg Hg /y	kg Hg /y	kg Hg /y	kg Hg /y	kg Hg /y
Europe	37	4'483	24'467	148'232	290	319	3'500	4'109	157'239
United States of America + Canada	5	591	0	3'845	14	14	917	945	1'572
India	8	215	2'323	5'177	25	0	170	195	442
Brazil + Argentina (1 plant) + Uruguay (1 plant)	7	438	21'716	9'753	49	13	1'371	1'434	4'765
Russia	3	402	40'903	29'790	37	20	700	757	21'607
Total	60	6'129	89'408	196'797	415	366.4	6'658	7'440	185'625

WCC - Chlor-Alkali Industry

Number of plants and capacity of mercury electrolysis units
in USA/Canada, Europe, Russia, India and
Brazil/Argentina/Uruguay

Number of
plants

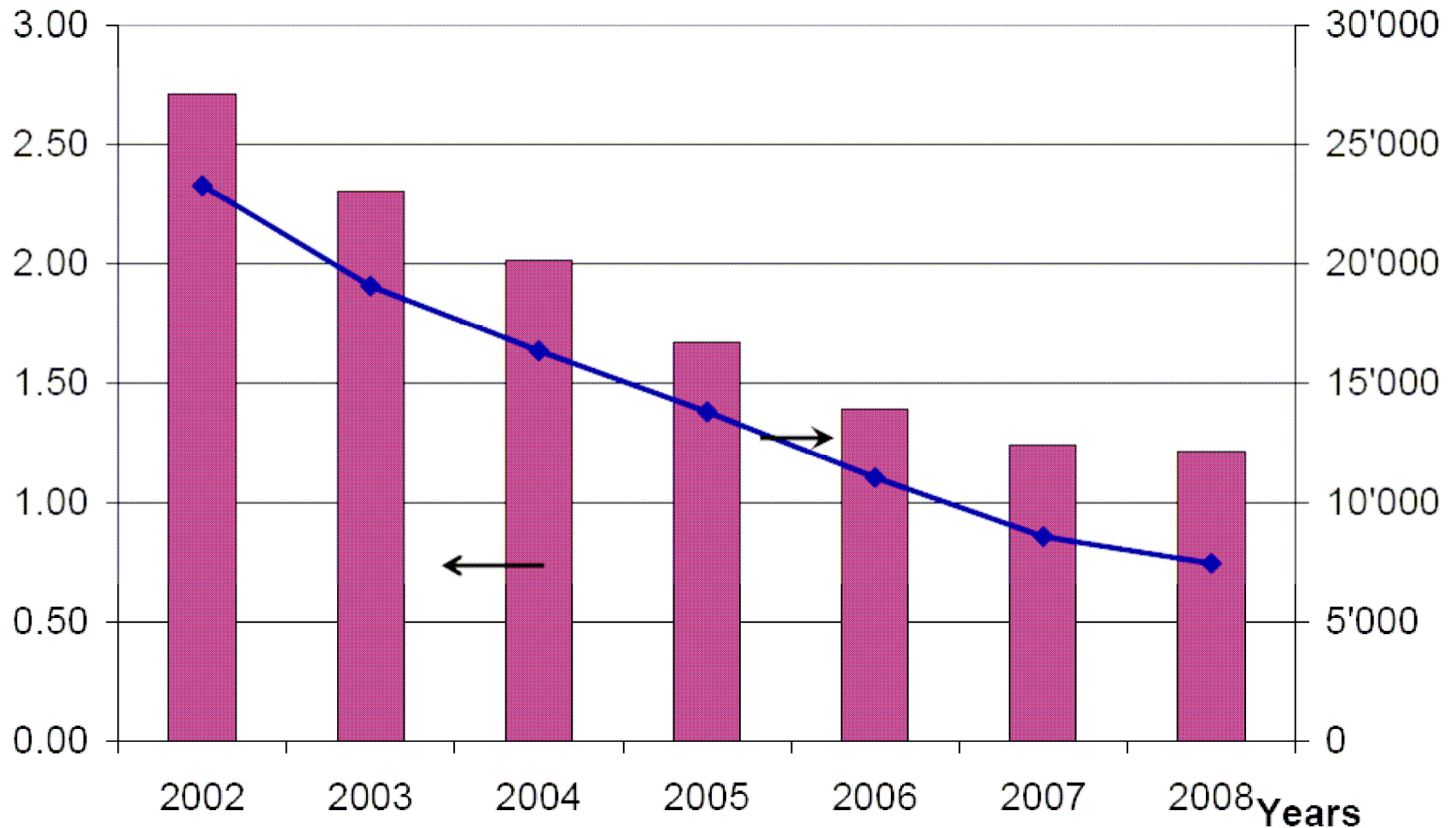
Capacity of
plants (1000 t/y)



WCC - Chlor-Alkali Industry

Total mercury emissions (air + water + products)
for USA/Canada, Europe, India and Brazil/Argentina

(plus 1 Uruguayan and 3 Russian plants from 2005 onwards)
g Hg/t Cl₂ annual cap.



Air transport and fate research

- 2006: Italy offered to lead this Partnership area in close cooperation with the U.S., Canada, Japan and other interested partners;
- Webpage maintained at the Italian National Research Council

<http://www.cs.ia.cnr.it/UNEP-MFTP/index.htm>.

Artisanal small-scale gold mining

- ASGM is a key partnership area, jointly led by UNIDO and NRDC;
- Target is to promote a 50 % reduction in mercury demand in ASGM by the year 2017;
- Focus is to strategically complement existing programmes on ASGM in developing countries;
- ASGM is a complex development issue (no quick fix):
 - Extremely decentralized
 - Limited effectiveness of regulatory approaches
 - An important mode of employment where alternatives not easily found.

What is needed to reduce Hg in ASGM?

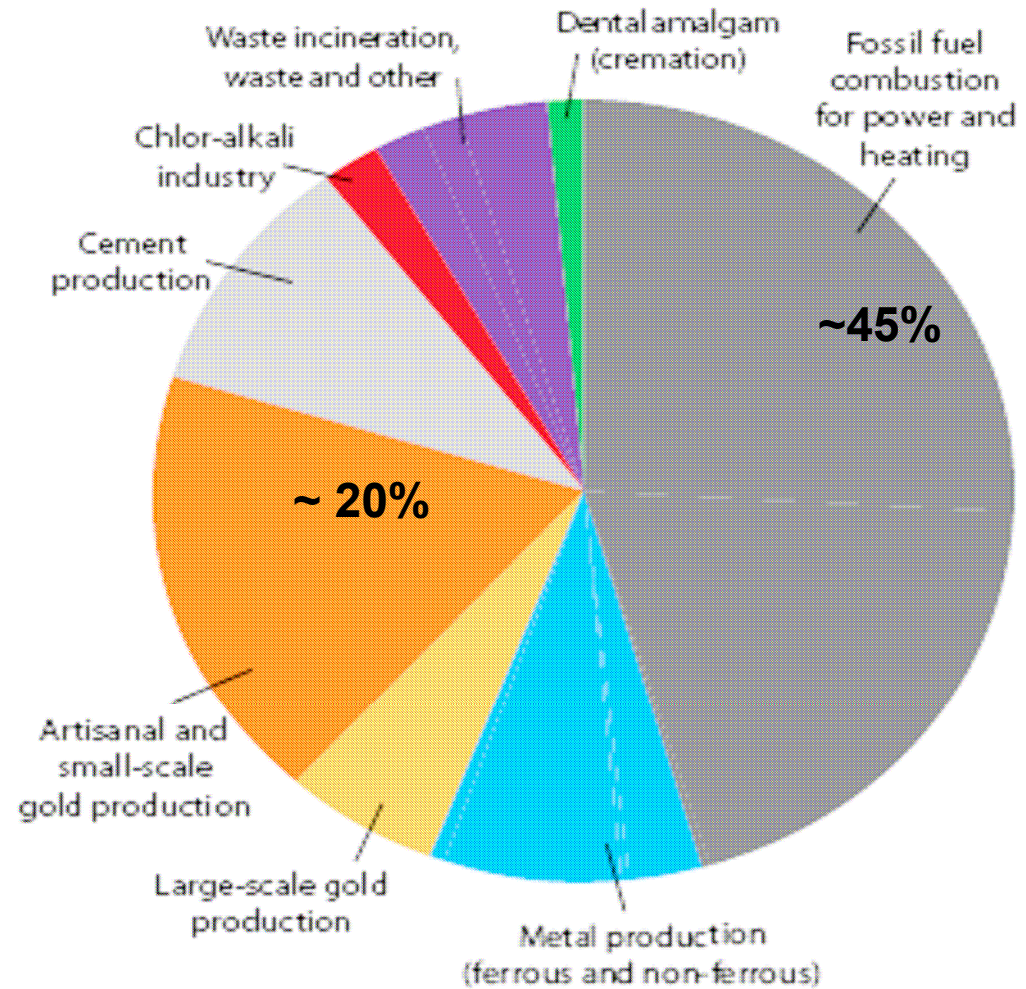
- Restrict supply and availability of Hg
 - Provide a price signal to miners to conserve
- Formalize / integrate miners
- Develop successful models of transition to low / non-mercury techniques
- Financial and technical support for scaling up

Coal Partnership Area

- Lead: International Energy Agency Clean Coal Centre (IEA CCC), Dr. Lesley Sloss;
- Objective is continued minimization and elimination of mercury releases where possible;
- Meets annually through the IEA CCC Mercury Emissions from Coal Expert Group
 - Next meeting is (16-18 June 2010, Glasgow)
 - Excellent opportunity for information exchange

Annual Hg emissions from coal combustion

Year 2005 emissions by Sector
(approx. 1,930 t per year)



Aims and activities

Partnership area specifically aims to:

- Supplement existing programs as part of a multi-pollutant reduction approach.
- Provide additional information on cost effective approaches for enhancing reductions of mercury emissions, particularly for developing nations.

Main activity

- Project: “Reducing Mercury Emissions from Coal Combustion in the Energy Sector” (2009-2011) funded by European Union over 3 years with 1 mio €
 - Co-funding (staff time) by UNEP
 - In-kind technical support from US EPA.

Coal project: objectives

- Develop guidance material on how to optimize multi-pollutant control techniques;
- Improve information on emissions and plants;
⇒ Results will contribute to “Paragraph 29 study”.
- Implement demonstration studies (Russia and South Africa);
- Transfer information and lessons learned to other countries
- Focus is on large source countries
China, India, Russia and South Africa.

GC 'Paragraph 29 Study'

- Governments requested UNEP to conduct a study that would inform the Intergovernmental Negotiating Committee (INC) on the following:
 - Various types of mercury-emitting sources
 - current and future trends of mercury emissions
 - costs and effectiveness of alternative control technologies and measures
- IVL contracted to prepare the study:
 - Zero Draft to be released shortly
 - Comments invited until 15 April 2010
 - Report submitted for INC2 by December 2010

The future mercury treaty

- Negotiations will begin at INC 1 from 7 to 11 June 2010 in Stockholm and will finish by February 2013;
- 5 Negotiating meetings (INCs) are anticipated between now and 2013;
- Will include both binding and voluntary measures.



Important dates:

- 7-11 June 2010 - INC1, Stockholm
- 2nd Meeting of Partnership Advisory Group, 20-22 Sep 2010, Geneva

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