

: Global Governance Spotlight

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The Minamata Convention. Towards a zero mercury world?

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After more than a decade of discussions and negotiations, the Minamata Convention on Mercury will be officially adopted by governments in October 2013 in Japan. The treaty's objective is to protect human health and the environment from anthropogenic mercury emissions. It contains a mixture of mandatory and voluntary elements and recognises that certain issues cannot be solved by regulation alone, necessitating wider approaches within a sustainability context. While some of the measures included were unthinkable a few years ago, the treaty does not move fast enough to reduce major sources and in the short term fails to address the spiraling human health risks, particularly in some developing countries. Yet over time the treaty sends the right market signal worldwide. A new phase now begins – preparation for treaty ratification and eventual implementation. After more than a decade in the making, countries should not lose the momentum from attaining this world agreement now.

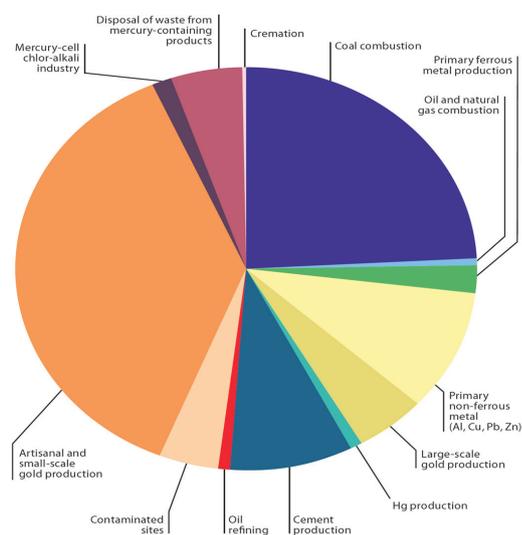
Mercury in the focus of the international community

Mercury is a highly toxic metal that is now omnipresent in the environment due to centuries of haphazard releases. There has been a several fold global increase in mercury in the environment since industrial times. Mercury is released from primary mercury mining, secondary mining operations, artisanal and small scale gold mining (ASGM), industrial processes (e.g. coal fired power plants, chlorine production), mercury added products (e.g. measuring devices, skin

lightening creams, dental amalgam) and many other sources.

When airborne, mercury becomes a transcontinental pollutant that, once deposited, bioaccumulates and bioconcentrates as it makes its way up the aquatic food chain into humans. Exposure to mercury, even at low levels, has been linked to central nervous system damage, kidney and liver impairment, reproductive and development disorders, defects in fetuses and learning disabilities in children. It is widely diffused through the atmosphere and has contaminated global food supplies at levels which pose a major risk

Figure 1: Emission estimates per sector



Source: UNEP 2013 Global Mercury Assessment, p. 10

to human health, with the developing world being most often disproportionately affected by this dangerous neurotoxin.

Mercury was brought up at the United Nations Environment Programme (UNEP) agenda around the turn of the century after the Arctic Council and governments following the Convention on Long Range Transboundary Air Pollution expressed concerns about mercury as a global pollutant. As a result of the Global Mercury Assessment's findings in 2002, the UNEP Governing Council (GC) decision in 2003 stated that there is "sufficient evidence of significant global adverse impacts from mercury and its compounds to warrant further international action to reduce the risks to human health." Many discussions followed under the auspices of the UNEP GC since then.

Voices were divided at the time with some influential countries supporting a voluntary approach, while others expressing the need for a legally binding instrument as the only meaningful way to rein in global mercury pollution. As a compromise, the 2005 GC decision called for voluntary cooperation between governments and other stakeholders as one approach to reducing mercury pollution, and the UNEP Global Mercury Partnership was created. The 24th GC meeting in 2007 then decided to review and assess two options: (1) enhanced voluntary measures and (2) new or existing international legal instruments to reduce global mercury pollution. Two years later, in 2009, the GC decided to begin negotiations for a legally binding treaty on mercury.

During the negotiations, delegations spent much time discussing how strong key provisions should be, which ones would be made mandatory or discretionary, and what the different approaches should be concerning reduction strategies for the different uses and sources of mercury emissions. Overall, most developed countries supported strong binding measures for reducing uses and emissions of mercury. In

many cases, however, other countries advocated for a "softer" approach with less stringent requirements mandated over longer periods of time. Negotiations were extremely difficult at certain points but the sense of urgency and diplomacy prevailed at the end allowing governments to achieve consensus on the final treaty text.

After four years of deliberation and five meetings of the Intergovernmental Negotiating Committee on Mercury, the text of the Minamata Convention on Mercury was agreed to in January 2013, in Geneva. The Convention will be officially adopted at the Diplomatic Conference in Japan in October. Fifty countries will need to sign the Treaty before it enters into force, and no later than 6 years after that date, the Conference of the Parties are required to evaluate the Convention's effectiveness.

The Convention, its strengths and weaknesses

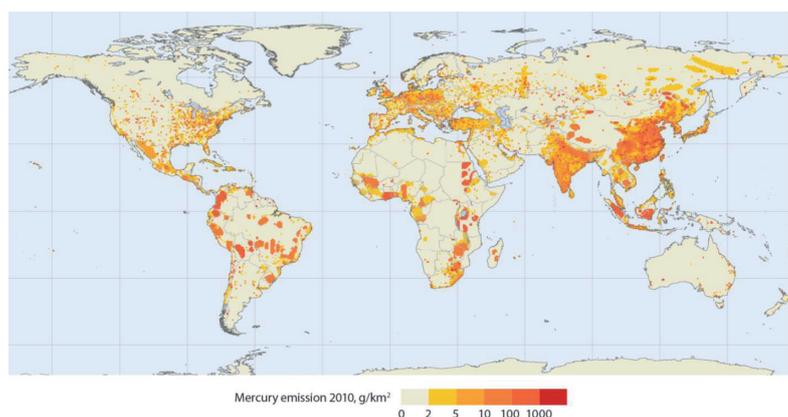
The objective of the Convention is to protect human health and the environment from anthropogenic emissions and releases of mercury and its compounds. The new treaty is a mixture of mandatory and voluntary elements, as well as of strong and weak requirements.

Product phase out requirements, for example, are relatively strong. Specific mercury-added products must be phased out by 2020. These include batteries (except silver oxide and zinc air button cells), skin lightening soaps and creams, biocides (but not vaccines), pesticides, topical antiseptics, barometers, hygrometers, manometers, thermometers, and blood pressure cuffs. There are exemptions for some sub-categories, for calibration and scientific research, and certain replacement applications. Maximum mercury content is set for some lamp categories and phase down measures should be taken concerning amalgam use.

With respect to processes, however, the deadlines for phase outs are too far out. Mercury cell chlor-alkali plants are subject to a 2025 phase out date. The manufacture of acetaldehyde using mercury is to be phased out by 2018. The manufacture of vinyl chloride monomer, polyurethane, and sodium methylate are subject to phase down requirements such as taking measures to reduce use, emissions and releases from these sectors, but without having to meet a defined phase out date.

The phase out dates for products and the chlor-alkali sector may be extended if a country requests an exemption. An initial five year extension will be easy to get; the second and last possible five year extension is subject to review and approval by all Parties to the Convention.

Figure 2: Global distribution of anthropogenic mercury emissions to air in 2010



Source: UNEP 2013 Global Mercury Assessment, p. 11

Reducing mercury emissions to air from industrial sources is of major importance and the treaty provisions should have been stricter and cover a wider range of industries. Air emissions from coal-fired power plants, industrial boilers, smelters of non-ferrous metals, cement kilns, chlor-alkali plants and waste incinerators are covered by the treaty. Parties may develop a national action plan to establish measures and set targets for reductions but time delays for taking action are far too long. Provisions for existing major industrial sources are delayed, making them rather weak initially. For existing sources, controls will need to be put in place by Parties within 10 years after entry into force of the treaty for a country, and are subject to a wider range of possible regulatory regimes, taking into account national circumstances. Parties can choose one or more options from a menu of strict or rather flexible measures; the measures proposed ranges from quantifying goals, setting emission limit values, use of best available techniques and best environmental practices, but also using multi-pollutant control strategy or alternative measures to control and where feasible reduce emissions. New facilities coming on line after the treaty comes into force will not be required to have mercury pollution controls for another 5 years.

Mercury releases to water and land not addressed elsewhere in the Convention shall be identified within 3 years of entry into force of the Convention by each government and are to be controlled and, where feasible, reduced. Control measures include a wide range of possible regulatory regimes.

Provisions foresee mercury trade reduction and written consent required to receive mercury from the importing country.

New primary mercury mining is to be prohibited. However, existing primary mercury mining in a country can still produce for a maximum of 15 years after entry into force of the treaty for this country. During this period mercury cannot be used for artisanal and small scale gold mining (ASGM).

Emissions of mercury from ASGM are the largest in the world, on the basis of the 2013 UNEP Mercury Assessment. Yet again, provisions in the treaty fall rather short for this sector – no phase out date for the use of mercury was set. Parties which determine that ASGM and processing in their territory is more than insignificant, shall notify the Secretariat of the convention, develop an action plan and review it every three years. So while national action plans will foster reduced use of mercury in ASGM, and excess mercury from the chlorine industry will not be available for ASGM practices, the treaty fails to include a provision to require an eventual end to this polluting practice.

The treaty provides for a financial mechanism which is also linked to the future compliance of the parties. Combining these two is a first under global

conventions. The mechanism will support developing countries and economies in transition in implementing their obligations under this Convention. It shall include (a) The Global Environment Facility Trust Fund (GEF TF), and (b) a specific international programme to support capacity-building and technical assistance. The GEF TF shall provide financial resources to meet costs in support of implementation of the treaty, and will be operated under the guidance of and be accountable to the Committee of the Parties. The GEF TF shall provide resources to meet the agreed incremental costs of global environmental benefits and the agreed full costs of some enabling activities. The details about the specific international programme will be defined at a later stage.

Some of the provisions in the new treaty were unthinkable just a few years ago. These include, but are not limited to, a relatively long list of product phase outs, a new stand alone health article and a required phase down in the use of dental amalgam. This is because alternatives now exist for most all products and processes containing mercury; technologies are available to control mercury releases from most major sources. In other fields – particular with regard to industrial emissions and the use of mercury in ASGM, the treaty is not far-reaching enough and timelines are too long. But still, the treaty sends the right market signal and will eventually lead to less exposure worldwide.

The way forward

A new phase now begins – preparation for treaty ratification and implementation. In order to continue building upon the forward motion created by the adoption of a new Convention, it is time to start looking ahead to next steps and create new strategic and funding opportunities for reducing mercury pollution.

It is very important that world governments not lose the momentum created by the recent agreement on the treaty, and sign it in October 2013, in Japan. Countries are also urged to ratify as early and by 2015 if possible, in order to enable the Convention to enter into force by then.

In the interim period – until the Convention enters into force –, countries need to consult internally, inventory their mercury uses and emissions/releases, and examine what parts of national legislation are relevant to meet treaty obligations. Such a process will help countries to visualise better what needs to be done to comply with the Convention and to clear the way to ratify the treaty rapidly.

It is important to highlight that this Convention is the first Multilateral Environmental Agreement to link financial assistance with compliance. Therefore,

developing states or countries with economies in transition are encouraged to move quickly towards ratification and eventual implementation in order to be able to take advantage of the technical and financial assistance that is expected to be available through the treaty structure and process.

In parallel, during the interim period, we advocate for short term mercury reduction activities to occur. Therefore, we urge countries to identify their priority areas and determine (1) where effective reductions on mercury pollution can be made in a relatively short time; and (2) laying the groundwork for mercury reduction over time, such as in the case where countries will be first developing and then implementing national action plans for ASGM. To that end activities could be initiated during this interim period targeting mercury trade and supply, phasing out products and processes where effective/efficient alternatives have been there for years, ASGM and emissions reduction, to start reducing mercury pollution in the global environment.

Finally the convention adoption process should further be followed by countries and interested stakeholders, first in order to prepare for an effective treaty entering into force and second, after the treaty becomes operational, in view of strengthening the Convention provisions, where possible.

In summary, the world's governments have determined that mercury is a global problem warranting immediate and long term international action. No one country can solve the mercury crisis – coordinated action is needed. We look forward to globally-coordinated treaty implementation, as the real challenge begins for the governments especially in developing and least developed states. The new mercury treaty, in spite of its flaws, presents a real opportunity for governments, industry, civil society and other stakeholders to work towards the significant reduction of mercury globally, eventually leading towards a zero mercury world.

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* Any reference to the Zero Mercury Working Group (ZMWG) is provided for identification purposes only. The statements in this article are not necessarily ZMWG positions, and may not necessarily reflect the views of its member organizations.

Recommended reading

The Zero Mercury Working Group (ZMWG) (www.zeromercury.org) is an international coalition of over 95 public interest environmental and health non-governmental organizations from more than 50 countries from around the world formed in 2005 by the European Environmental Bureau and the Mercury Policy Project. ZMWG strives for zero supply, demand, and emissions of mercury from all anthropogenic sources, with the goal of reducing mercury in the global environment to a minimum.

Minamata Convention on Mercury (http://www.unep.org/hazardoussubstances/Portals/9/Mercury/Documents/dipcon/CONF_3_Minamata%20Convention%20on%20Mercury_final%2026%2008_e.pdf).

UNEP 2013 Global Mercury Assessment, Geneva 2013 (<http://www.unep.org/PDF/PressReleases/GlobalMercuryAssessment2013.pdf>).

UNEP Website on “Reducing Risk from Mercury” (<http://www.unep.org/hazardoussubstances/mercury/tabid/434/default.aspx>).

Website of the 23rd UNEP Governing Council 2005 (<http://www.unep.org/gc/gc23/>).

Website of the 25th UNEP Governing Council 2009 (<http://www.unep.org/gc/gc25/>).

Imprint

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