

Experts will present available information on mercury material flow focusing on supply, demand and trade in mercury. Presentations will include updated information after the publication of UNEP Mercury Supply, Demand and Trade report, studies on illicit trade, and national studies on mercury material flow. There will be a panel discussion on how to improve the knowledge on mercury material flow.

SPEAKERS



Peter Maxson
Director, Concorde East/West SPRL



Barbara Hendus
Program Officer Extractives & Conservation, IUCN National Committee of the Netherlands



Okechukwu Jonathan Okonkwo
Professor Emeritus, Tshwane University of Technology



Thomas Groeneveld
Special Assistant, U.S. Environmental Protection Agency



Joy Leaner
Co-chair, International Conference on Mercury as a Global Pollutant 2022



Ken Davis
Programme Management Officer, UN Environment Programme



Eisaku Toda
Senior Programme Officer, Minamata Convention on Mercury



Tuesday 29 September 2020

14:00 – 15:30 CEST

Please register for the WebEx session using the links above.

More information about Minamata Online [here](#)

Check the Minamata Online [calendar](#)



Minamata Convention - effectiveness evaluation



- Article 22 requires COP to periodically evaluate the effectiveness of the Convention

Article 22

Effectiveness evaluation

1. The Conference of the Parties shall evaluate the effectiveness of this Convention, beginning no later than six years after the date of entry into force of the Convention and periodically thereafter at intervals to be decided by it.
2. To facilitate the evaluation, the Conference of the Parties shall, at its first meeting, initiate the establishment of arrangements for providing itself with comparable monitoring data on the presence and movement of mercury and mercury compounds in the environment as well as trends in levels of mercury and mercury compounds observed in biotic media and vulnerable populations.
3. The evaluation shall be conducted on the basis of available scientific, environmental, technical, financial and economic information, including:
 - (a) Reports and other monitoring information provided to the Conference of the Parties pursuant to paragraph 2;
 - (b) Reports submitted pursuant to Article 21;
 - (c) Information and recommendations provided pursuant to Article 15; and
 - (d) Reports and other relevant information on the operation of the financial assistance, technology transfer and capacity-building arrangements put in place under this Convention.

- COP Decision MC-3/10 requests the Secretariat to work on a “mercury trade, supply and demand report, including mercury waste flows and stocks

MC-3/10: Arrangements for the first effectiveness evaluation of the Minamata Convention on Mercury

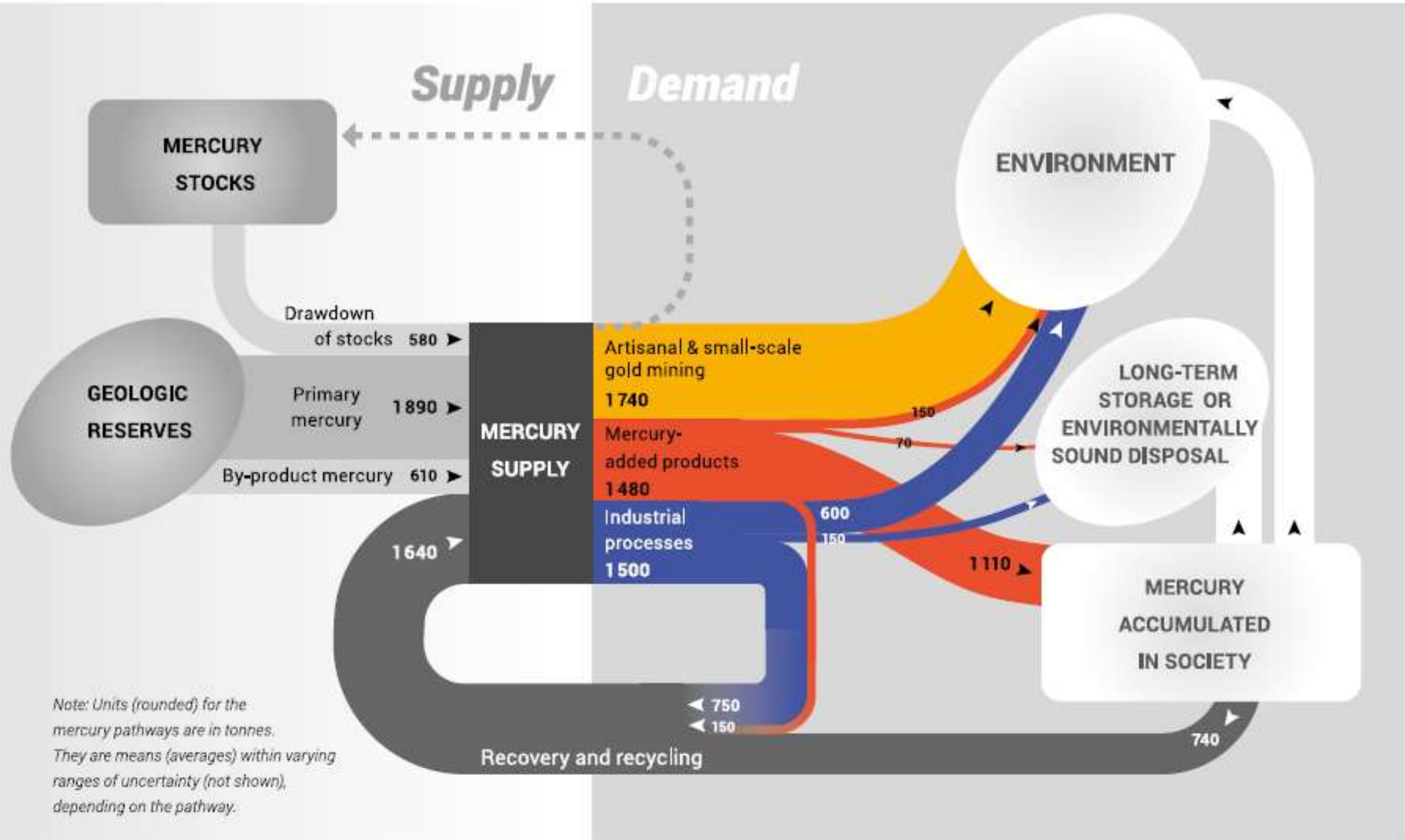
The Conference of the Parties,

Welcoming the report on the proposed framework for the effectiveness evaluation and monitoring arrangements under the Minamata Convention,⁸ and the complementing information developed by the ad hoc technical expert group on the basis of the mandates set out in decisions MC1/9 and MC-2/10,⁹

Recognizing the efforts to advance the work on the effectiveness evaluation at the third meeting of the Conference of the Parties,

1. *Invites* parties to submit views on the indicators set out in annex I to the present decision and requests the secretariat to compile those views in advance of the fourth meeting of the Conference of the Parties;
2. *Requests* the secretariat to advance the work by securing services for drafting:
 - (a) Guidance on monitoring to maintain harmonized, comparable information on mercury levels in the environment, taking into consideration the draft structure set out in the note on background information on mercury monitoring;¹⁰
 - (b) Reports set out in the framework in annex II to the present decision with the exception of the emissions and releases report, the monitoring report, and the modelling report.

Global mercury supply and demand, 2015



Note: Units (rounded) for the mercury pathways are in tonnes. They are means (averages) within varying ranges of uncertainty (not shown), depending on the pathway.

Article 21 reporting - format

Article 3: Mercury supply sources and trade

1. Does the party have any primary mercury mines that were operating within its territory at the date of entry into force of the Convention for the party?

If yes, please indicate:

- a) The anticipated date of closure of the mine(s): (month, year) OR
- b) The date upon which the mine(s) closed: (month, year)
- c) *Total amount mined _____ metric tons per year

2. Does the party have any primary mercury mines that are now in operation that were not in operation at the time of entry into force of the Convention for the party?

If yes, please explain.

3. Has the party endeavoured to identify individual stocks of mercury or mercury compounds exceeding 50 metric tons and sources of mercury supply generating stocks exceeding 10 metric tons per year that are located within its territory?

*If yes, please attach the results of your endeavour or indicate where it is available on the internet.

Supplemental: Please provide any related information, for example on the use or disposal of mercury from such stocks and sources.

4. Does the party have excess mercury available from the decommissioning of chlor-alkali facilities?

If yes, please explain the measures taken to ensure that the excess mercury was disposed of in accordance with the guidelines for environmentally sound management referred to in paragraph 3 (a) of article 11 using operations that did not lead to recovery, recycling, reclamation, direct re-use or alternative uses. .

5. *Has the party received consent, or relied on a general notification of consent, in accordance with article 3, including any required certification from importing non parties, for all exports of mercury from the party's territory in the reporting period.

If yes,

a. and the party has submitted copies of the consent forms to the secretariat, then no further information is needed.

If the party has not previously provided such copies, it is recommended that it do so.

Otherwise, please provide other suitable information showing that the relevant requirements of paragraph 6 of article 3 have been met.

Supplemental: please provide information on the use of the exported mercury.

b. If exports were based on a general notification in accordance with article 3, paragraph 7, please indicate, if available, the total amount exported and any relevant terms or conditions in the general notification related to use.

6. Has the party allowed the import of mercury from a non-party? If yes, and the party has submitted copies of the consent forms to the secretariat, then no further information is needed.

If the party has not previously provided such copies, it is recommended that it do so.

Otherwise, please provide other suitable information showing that the relevant requirements of paragraph 8 of article 3 have been met.

Supplemental: Please provide information on the quantities and countries of origin.

* Yellow-highlighted questions are for short report to be responded by 31 December 2019. Other questions are for full report due by 31 December 2021

Examples of a few mercury material flow / Inventories (including research work)	Coverage
Global Mercury Supply, Trade, Demand (UNEP) (2006 and 2017)	Global
Mercury material flow in Japan (For Fiscal Year 2010, 2014, 2016)	Japan
Inventory of Mercury supply, use and trade in the US (2020, Data of 2018)	USA
The Materials Flow of Mercury in the Economies of the United States and the World (Published 2000)	USA
Mercury flows in china and global drivers (Published 2017)	China
Anthropogenic mercury flows in India and impacts of emission controls (Published 2013)	India
Lead, Cadmium and Mercury Flow Analysis – Decision Support for Austrian Environmental Policy (Published 2009)	Austria
Mass Flow Analyses of Mercury 2001	Denmark
Substance flow analysis for mercury emission in Poland (published 2013)	Poland
Substance flow analysis of mercury in Malaysia (published 2016)	Malaysia
Modeling mercury flows in Thailand on the basis of mathematical material flow analysis (published 2016)	Thailand
Substance flow analysis of mercury in Turkey for policy decision support (Published 2018)	Turkey

Observations of varying approaches

1 .Inventory vs Material Flow Analysis

Sector wise Use/emission VS Flow between sectors

2 .Differing system boundaries

National boundaries VS Impact of global consumption to domestic emissions (e.g. China)

3 . Uncertainties due to varying sources of data used

- . Existing statistical data
- . Literature surveys
- . Actual measurement
- . Questionnaires
- . Interviews
- . Expert opinions
- . Use of “toolkit”
- . PRTR data

4 . Difference in approach to estimation

Attempt to Balance the input/output VS No attempt to balance (e.g. designate the discrepancy between I/O as “stock”)

Some Examples

Japan MMF (multiple versions)

Identification of flow of mercury between sectors and quantification using multiple data sources – periodically updated.

China (2017) - Publication

Link of Substance flow analysis (identify hg emission and release from the production side in china) with EE-MRIO model (analyze china`s emission driven by global consumption activities) .

India (2013) - Publication

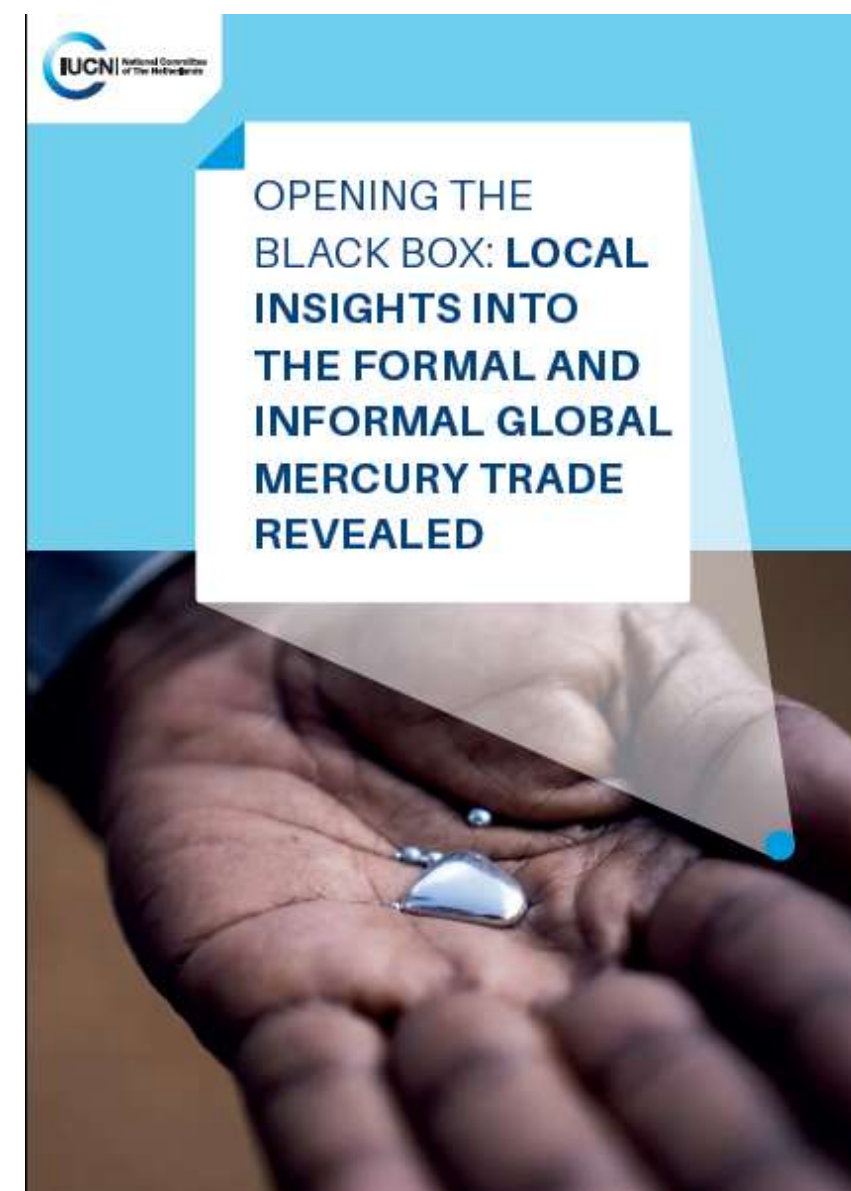
Use of dynamic material flow analysis. Dynamic MFA includes a time component and addresses the accumulation and depletion of stocks over time (2001-2020).

Mercury trade – a few examples of studies



Global studies

- UNEP. 2020. Illegal trade in chemicals.
- IUCN Netherlands. 2020. Opening the black box: local insights into the formal and informal global mercury trade revealed.



Regional/national studies

- UNIDO. 2018. Curbing illicit mercury and gold flows in West Africa: options for a regional approach
- Julián Casasbuenas G and Plácido Silva Duarte. 2018. Mercury trade and supply in artisanal and small-scale gold mining in Colombia.
- Centre for Environment Justice and Development. 2018. Mercury trade and supply in ASGM hotspots: Kenya Country situation report

Minamata Online Season 1



29 September 2020

Mercury material flow – supply, demand and trade

- Peter Maxson, Concorde East/West sprl, Belgium
- Barbara Hendus, IUCN Netherlands
- Jonathan Okonkwo, Tshwane University of Technology, South Africa
- Tom Groeneveld, US EPA

8 October 2020

Implementation review and support: Article 3 – Trade

15 October 2020

Mercury material flow – waste

- Misuzu Asari, Kyoto University
- Qingru Wu, Tsinghua University
- Gabriela Medina, Basel and Stockholm Convention Regional Center, Uruguay
- Alexander Romanov, Russia
- Other speakers tbd

22 October 2020

Implementation review and support: Article 8 – Emissions

3 November 2020

COP-4: 365 days to go

5 November 2020

Mercury emission – estimation and projection

- Jozef Pacyna, AGH University of Science and Technology, Poland
- Shuxiao Wang, Tsinghua University
- Simon Wilson, AMAP
- Rico Euripidou, Groundworks
- Toshihiko Masui, National Institute for Environmental Studies, Japan
- Other speakers tbd

12 November 2020

Implementation review and support: Article 11 – Waste