

# Minamata Convention and PRTR

Eighth Meeting of the Working Group of Parties to the  
UNECE PRTR Protocol

16-18 December 2020

**Secretariat of the Minamata Convention  
on Mercury**



# Logic of the Minamata Convention



## Control Measures

Reduce the use and presence of mercury in the economy, industry and society

Keep mercury underground

Art. 3.5 (a): Stocks

Art. 3.5 (b): Excess mercury from decommissioned chlor-alkali facilities

Art. 3.3: No new primary mines

Art. 3.6 – 3.10: Trade of mercury

Art. 3.4: Existing mines - 15 years

Art. 4: Mercury-added Products

Art. 5: Manufacturing Processes

Art. 7: ASGM

Art. 10: Interim Storage

Art. 11: Mercury wastes

Art. 12: Contaminated sites

Reduce mercury to the environment

Art. 7: ASGM

Art. 8: Emissions

Art. 9: Releases



## Enabling / Supportive Context

Art. 13: Financial Mechanism

Art. 14: Capacity-building, technical assistance and technical transfer

Art. 15: Implementation and Compliance Committee

Art. 16: Health aspects

Art. 17: Information Exchange

Art. 18: Public information, awareness and education

Art. 19: Research, development and monitoring

Art. 20: Implementation plans

Art. 21: Reporting

Art. 22: Effectiveness evaluation

Art. 23: Conference of the Parties

Art. 24: Secretariat

Arts. 25-35: Various procedural articles

# Minamata Convention – Hg emissions and releases



**Article 1** (Objective): The objective of this Convention is to protect the human health and the environment from anthropogenic **emissions and releases** of mercury and mercury compounds.

**Article 8** (Emissions): Controlling and reducing Hg **emissions to air** from point sources

**Article 9** (Releases): Controlling and reducing Hg **releases to land and water** from point sources

**Article 11** (Mercury waste): Environmentally sound management of **mercury waste**

**Article 18** (Public information, awareness and education) Para 2: Each Party shall use existing mechanisms or give consideration to the development of mechanisms, such as **pollutant release and transfer registers** where applicable, for the collection and dissemination of information on estimates of its annual quantities of mercury and mercury compounds that are emitted, released or disposed of through human activities.

**Article 22** (Effectiveness evaluation): Evaluating the effectiveness of the Convention

# Article 8 – Emissions



- Controls the emissions of total mercury from point sources listed in Annex D:
  - Coal-fired power plants;
  - Coal-fired industrial boilers;
  - Smelting and roasting processes used in the production of non-ferrous metals (lead, zinc, copper and industrial gold);
  - Waste incineration facilities;
  - Cement clinker production facilities
- New sources – require the use of best available techniques and best environmental practices (BAT/BEP) no later than 5 year after the entry into force (EIF)
- Existing sources – implement control measures no later than 10 years after EIF
- Each Party shall establish an inventory of emissions from relevant sources no later than 5 yeast after EIF
- COP shall adopt guidance on
  - BAT/BEP
  - Methodology for preparing inventories of emissions

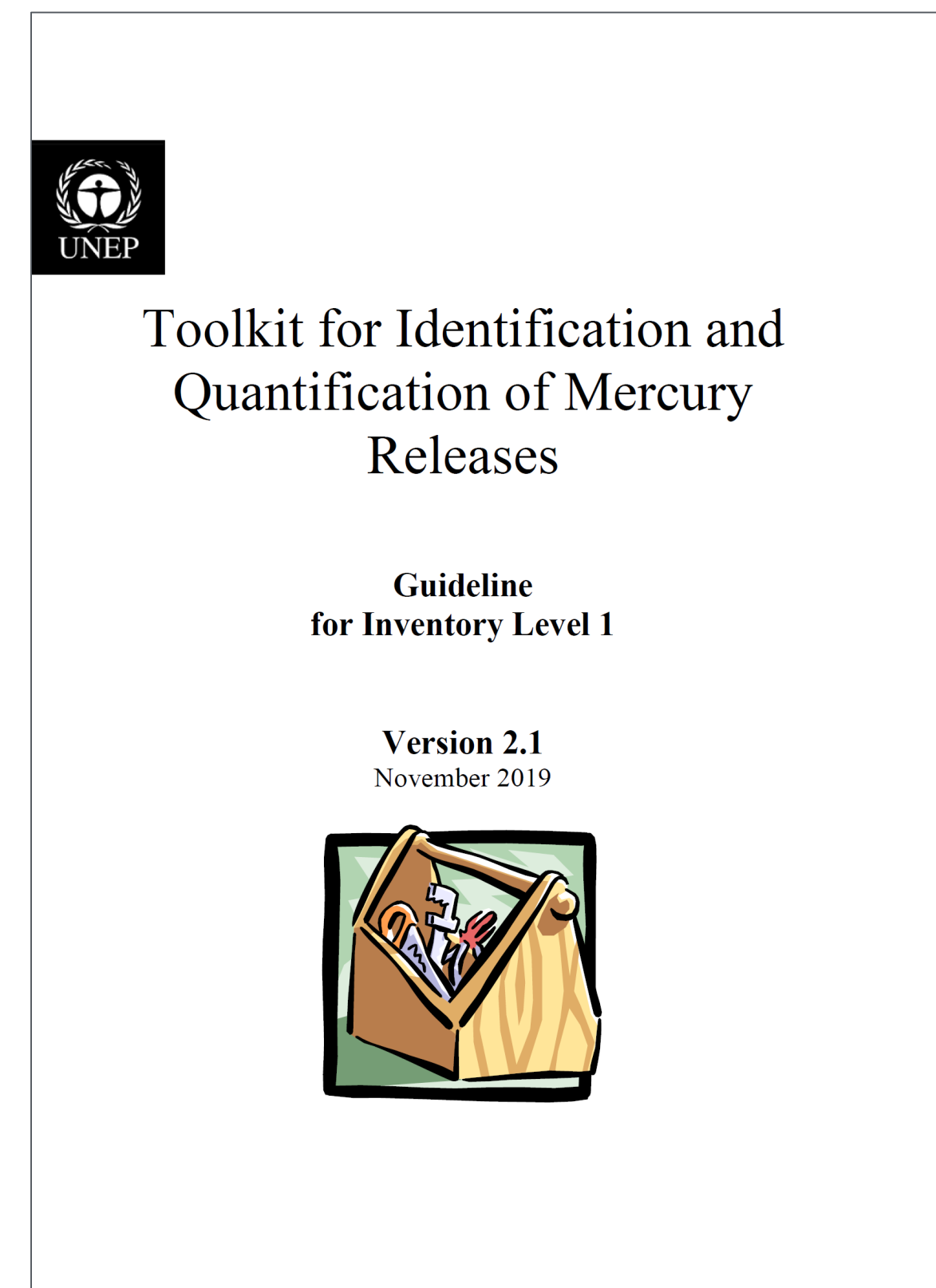
# Guidance on the methodology for preparing inventories of emissions pursuant to Article 8



Methodology to establish an emissions inventory typically involves many or all of the following steps:

- Plan the approach for development of inventory, within available resources, and consider how to collect, handle and review data, including any quality control and quality assurance processes
- Collect existing emissions data as a useful starting point
- Identify relevant sources within each source category
- Establish facility-based emissions reporting requirements
- Collect the emissions reports from facilities on a periodic basis (e.g. annually)
- Develop a database to store the reported emissions data
- Facilitate analysis of the results
- Make the data publicly accessible and searchable.

**UNEP inventory toolkit** could be a good starting point for parties developing their own emissions inventories.



# Article 9: Releases



Article 9 concerns controlling and reducing **releases of mercury and mercury compounds to land and water** from the relevant point sources not addressed in other provisions of the Convention.

COP-2 established a group of technical experts that will prepare a report including **a list of any significant anthropogenic point source of release categories**, along with a suggested roadmap and structure for the development of draft guidance on methodologies for preparing its inventories, for possible adoption by COP-3.

COP-3 agreed on the roadmap, the group will further develop draft guidance on standardized and known methodologies for preparing inventories for possible adoption by COP-4.

Article 9 provides that COP shall adopt guidance on best available techniques and on best environmental practices.

# Article 11: Mercury waste



Each Party shall take appropriate measures so that **mercury waste** is managed in an environmentally sound manner, taking into account the Basel Convention guidelines, and in accordance with requirements that COP shall adopt in an additional annex.

Mercury wastes means substances or objects:

(a) Consisting of mercury or mercury compounds;

(b) Containing mercury or mercury compounds; or

(c) Contaminated with mercury or mercury compounds,

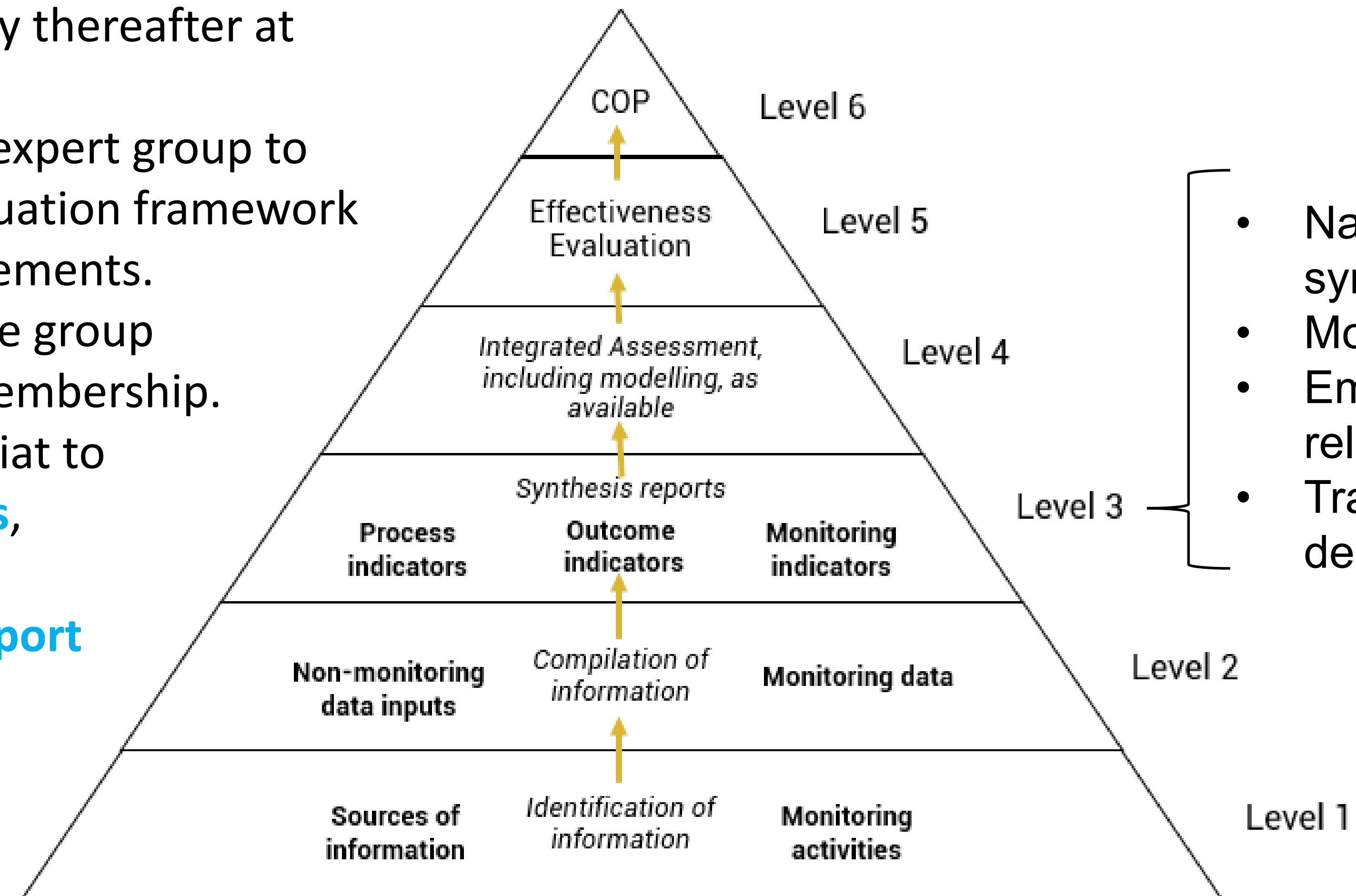
in a quantity above the **relevant thresholds defined by COP** that are, are intended to be, or are required to be disposed of.

This definition excludes overburden, waste rock and tailings from mining, except from primary mercury mining, unless they contain mercury or mercury compounds above **thresholds defined by COP**.

# Article 22: Effectiveness evaluation



- The COP shall evaluate the effectiveness of the Convention, beginning no later than six years after the date of entry into force of the Convention (i.e., 2023 – COP-5) and periodically thereafter at intervals to be decided by it.
- COP-1 established an ad-hoc expert group to discuss the effectiveness evaluation framework and global monitoring arrangements.
- COP-2 extended the ToR of the group amending its mandate and membership.
- COP-3 requested the Secretariat to work on **evaluation indicators, guidance on monitoring, and supply, demand and trade report**



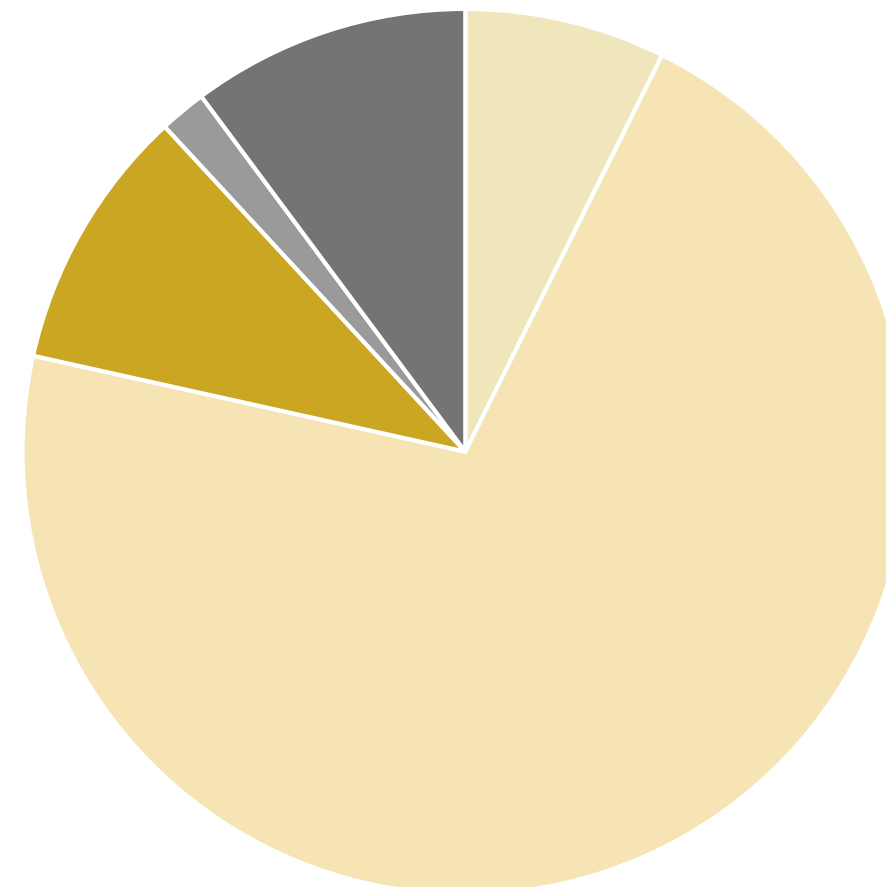


# Global Mercury Assessment 2018 (2015 estimate, tonnes)

Total mercury emission	2,224
Coal combustion	474
Non-ferrous metals	327
Cement production	233
Waste incineration	15

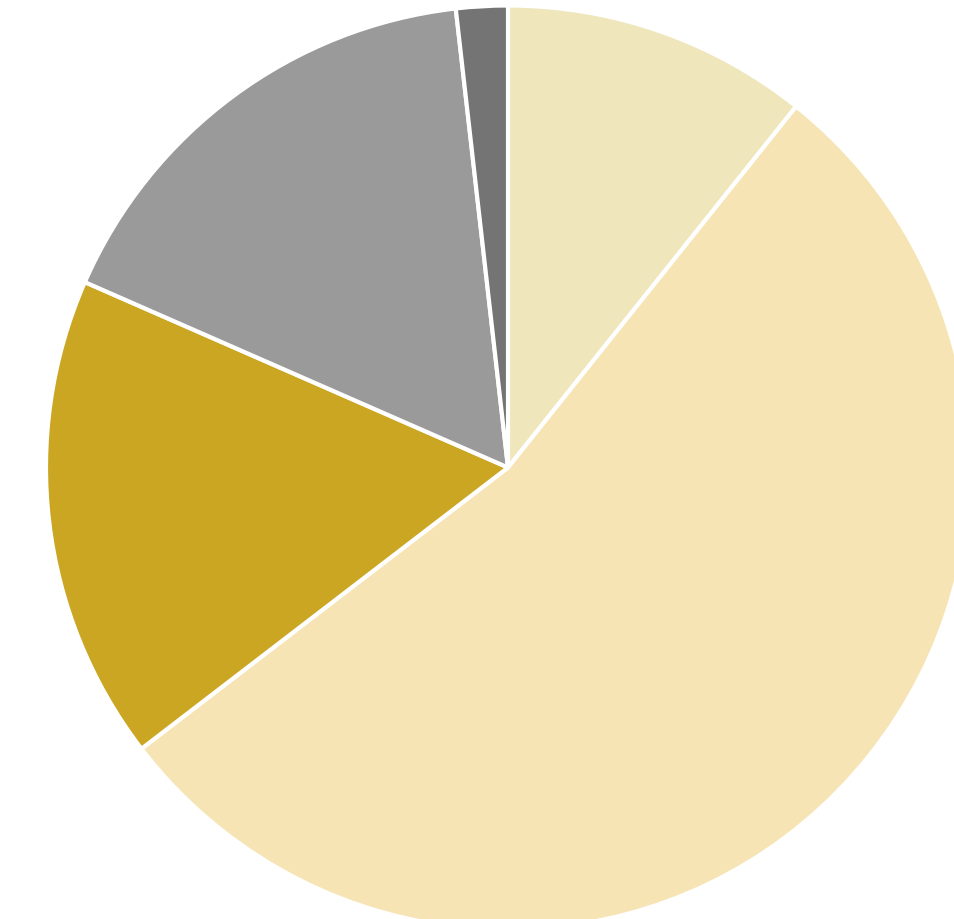


Coal Combustion



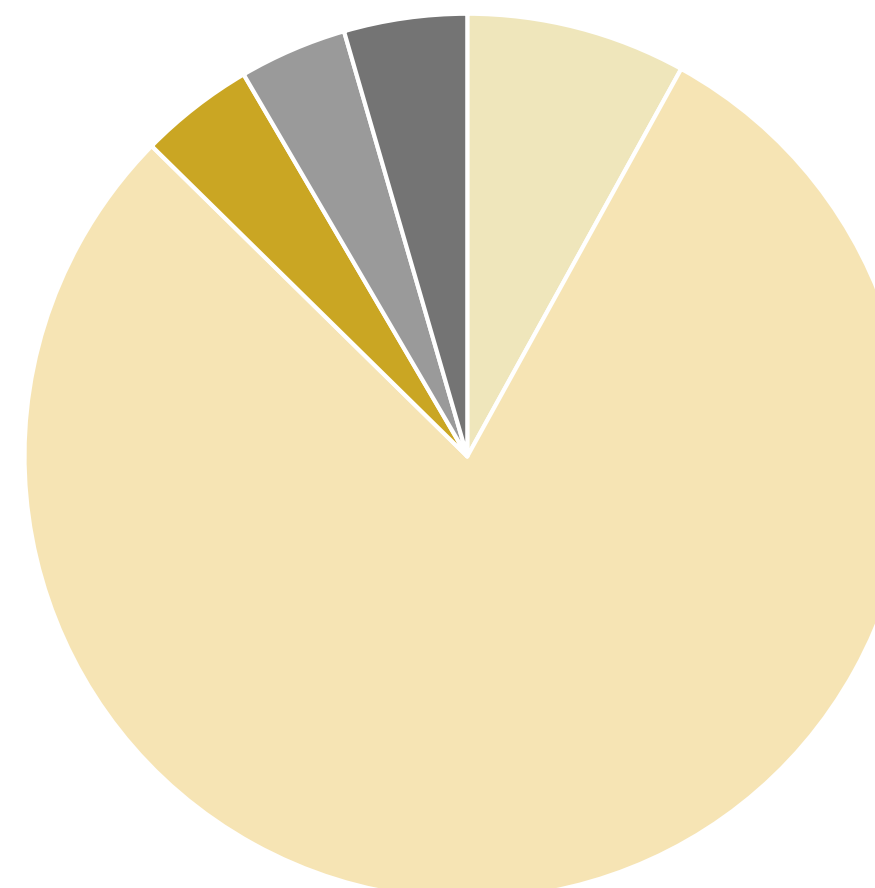
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Non ferrous metals



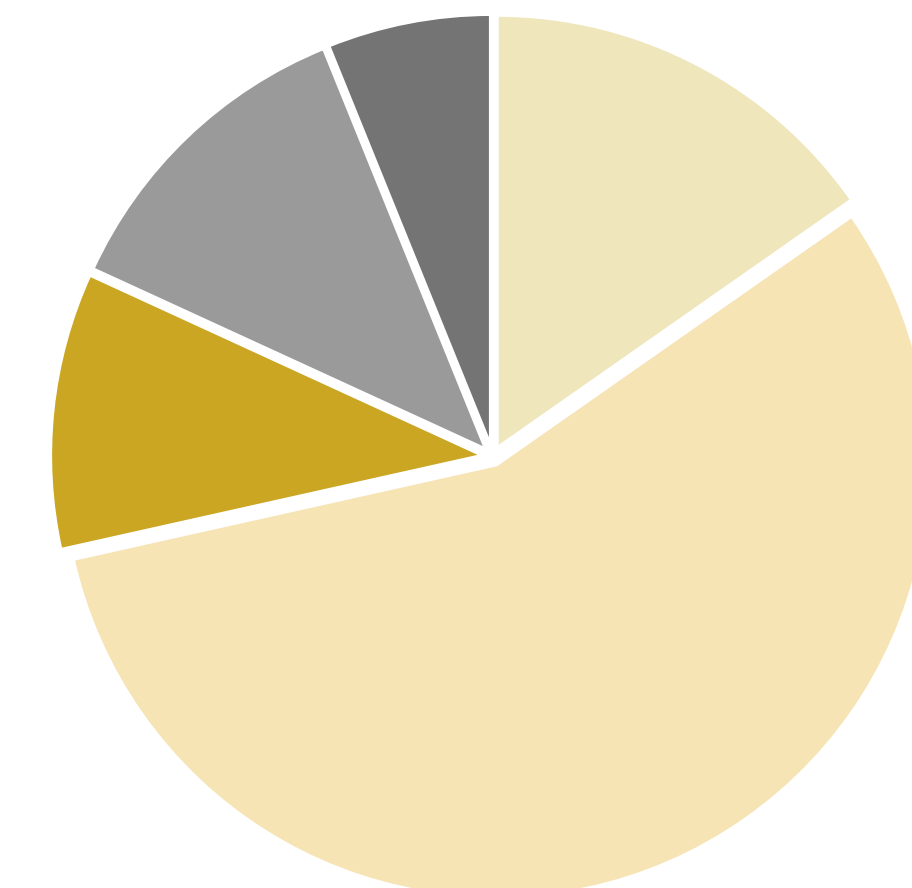
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Cement production

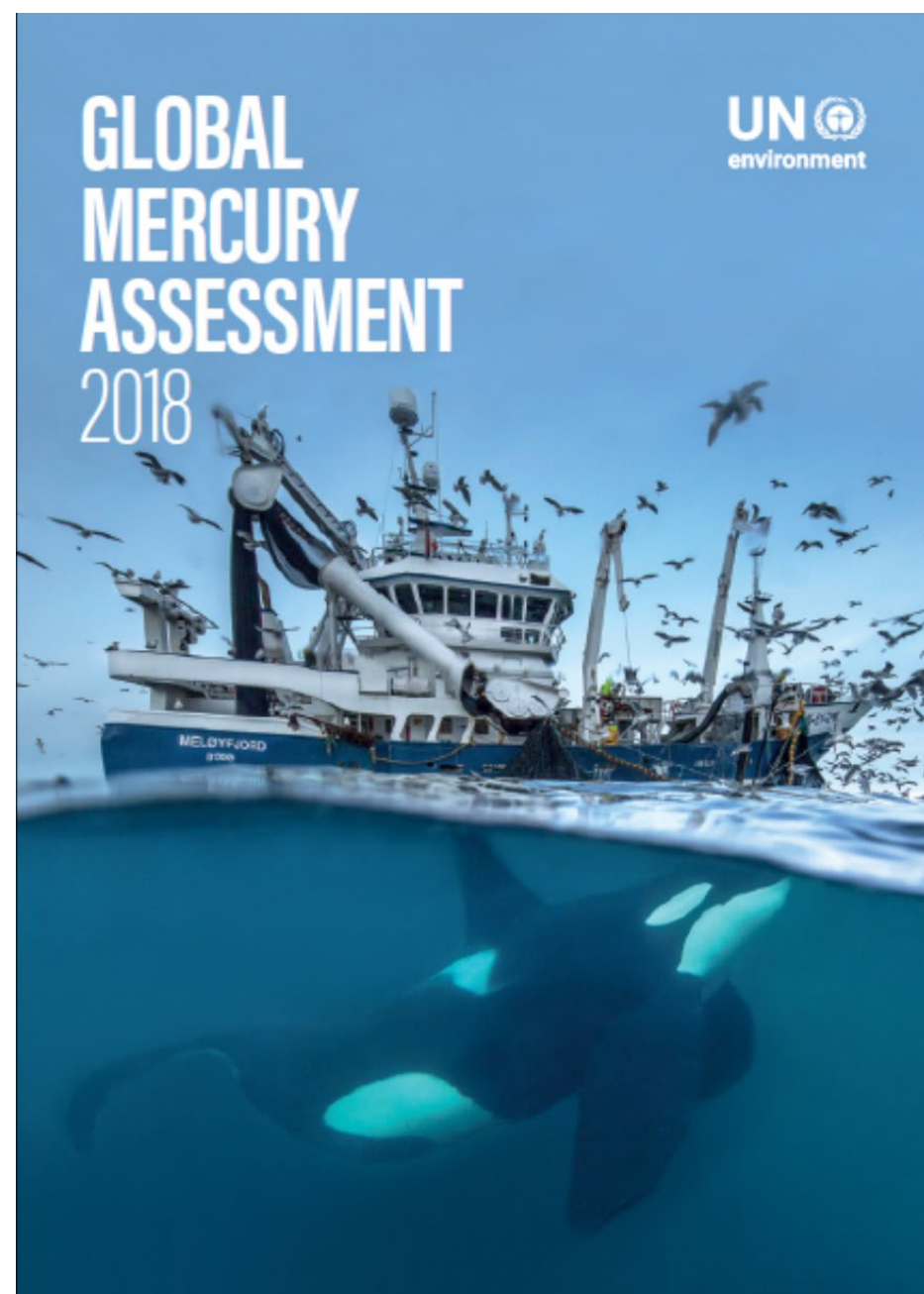


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Waste incineration



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# How well do GMA estimates compare?

- **LRTAP:** good for some countries, less good for others; reasonable taking uncertainties into account (EU GMA estimate uncertainty -13%/+38%)
- **MIAs:** final MIAs not available; comparisons with preliminary MIAs identified some discrepancies; in principle GMA and UN Toolkit (Level 2) based approaches should be comparable
- **Other national inventories:** generally good on totals, and for some but not all sectors (harmonized through national input to GMA work)

