FIRST FULL NATIONAL REPORTS OF THE MINAMATA CONVENTION ON MERCURY 2021
• Questions 3.3, 8.3 and 13.2 amended by Indonesia on 12 September 2022

REPORTING PERIOD:
16 August 2017 to 31 December 2020

▼ INFORMATION ON THE PARTY

1. Information on the party

Name of party
Indonesia

Date on which its instrument of ratification, accession, approval or acceptance was deposited
22 September 2017

Date of entry into force of the Convention for the party
21 December 2017

2. Information on the national focal point

Full name of the institution
Ministry of Environment and Forestry

Title of National Focal Point
Ms.

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Focal Point is submitting the national report

- Information is submitted by the national focal point
- Information is submitted through the national focal point by the contact officer

**a3_subsection**

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▼ ART. 3: MERCURY SUPPLY SOURCES AND TRADE

3.1. 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?

- Yes
- No

Additional information on this question if needed
The Government of Indonesia has never issued any permit for cinnabar mining business either prior to, or after, the date of entry into force of the Convention for Indonesia.
3.2. 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?

- Yes
- No

3.3. 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?

- Yes
- No

*If the party answered Yes to Question 3 above:

i. Please attach the results of your endeavor or indicate where it is available on the internet, unless unchanged from a previous reporting round.

The Indonesian government has conducted an inventory of individual stocks of Mercury or Mercury compounds and sources of mercury in several sectors. In ASGM sector, based on the identification and reports from the Local Action Plan for Mercury Reduction and Elimination, there are no miners who have individual stocks of mercury or mercury compounds that exceed 50 MT, and no source of mercury supply exceeding 10 MT per year within the ASGM area. In the manufacturing sector, Indonesia does not have any individual stocks of mercury or mercury compounds that exceed 50 MT.

Indonesia has also stipulated the regulation of the Ministry of Trade number 75 year 2014 that prohibits Mercury distribution. In addition, the Ministry of Energy and Mineral Resources has issued a similar regulation, the ministerial decree No. 1827 of 2018 regarding the prohibition of Mercury use in processing and refining gold metal. The regulation intended to prevent any individual Mercury stocks exceeding 50 MT.

i. Please attach the results of your endeavor or indicate where it is available on the internet, unless unchanged from a previous reporting round.

Hereby the attach link for Ministry of Trade regulation number 75 year 2014 and ministerial decree of Energy and Mineral Resources No. 1827 of 2018:


The regulation is only written in Bahasa.

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

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

- Yes
- No

3.5. *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?

- Yes, exports to parties
Yes, exports to non-parties

No

Additional information if needed
Based on our trade database, the last Mercury imported by Indonesia was in 2014 and the government never issued nor approved any export document related to Mercury. With that situation, Indonesia has never received or relied on a general notification of consent. Indonesia also prohibited the trade of Mercury under the Ministry of Trade Regulation No. 47 of 2019 concerning the Third Amendment of The Regulation of The Minister of Trade Number 44/M-Dag/Per/9/2009 Concerning Procurement, Distribution And Control of Hazardous Materials.

3.6. Has the party allowed the import of mercury from a non–party?

No

Yes

The importing party has relied on paragraph 7 of article 3

Part E – Additional comments on the article in free text if the party chooses to do so

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**ART. 4: MERCURY-ADDED PRODUCTS**

4.1. Has the party taken any appropriate measures to not allow the manufacture, import or export of mercury-added products listed in Part I of Annex A of the Convention after the phase-out date specified for those products?

Yes

No

Yes (implementing paragraph 2 of article 4)

If yes, please provide information on the measures.
Referring to Law number 11 of 2017 concerning the Minamata Convention on Mercury, regarding mercury added products in part I of annex A, by the moment this national report is developed, the following mercury-added products have been regulated for phasing-out and substitution:

a) blood pressure measuring devices (sphygmomanometers);
b) clinical thermometers;
c) dental amalgam;
d) pesticides, biocides, and topical antiseptics;
e) Cosmetics containing Mercury;

The import, export and trade of mercury-containing thermometers and sphygmomanometers have been banned by the regulation/decrees of Minister of Trade Regulation Number 18 of 2021 concerning Prohibited Goods Export and Import Prohibited Goods. Also, by the Regulation/Decree of the Minister of Health No. 41 of 2019, thermometers, sphygmomanometers and dental amalgam containing mercury in health-care facilities, are targeted to be fully substituted by the end of 2021. A Japan-funded project through the Secretariat of ASEAN was developed and implemented by the Asian Institute of Technology’s Regional Resources Centre for Asia–
4.3. Has the party taken two or more measures for the mercury–added products listed in Part II of Annex A in accordance with the provisions set out therein?

- Yes
- No

If yes, please provide information on the measures.
Actions that have been taken to regulate dental amalgam include:
- Policy publishing
- Capacity building (education) especially for health–care facilities
- Cooperation with related ministries and institutions to ban the entry of mercury medical devices and dental amalgam into Indonesia

4.4. Has the party taken measures to prevent the incorporation into assembled products of mercury–added products whose manufacture, import and export are not allowed under article 4?

- Yes
- No

If yes, please provide information on the measures.
Prevention of the use of Mercury added product in Indonesia as a component into assembled products has been carried out, by:
1. Prohibiting the marketing of mercury medical devices and discontinuing the use of mercury medical devices by issued Minister of Health Regulation Number 41 year 2019 concerning the Elimination and Withdrawal of Mercury Medical Devices in Health Care Facilities.
2. Prohibiting the addition of Mercury content in cosmetics listed in BPOM Regulation No. 23 of 2019 concerning Technical Requirements for Cosmetic Ingredients, even though there is still found mercury content in mercury products (as impurity) < 1 ppm.
3. In the domestic lamp industry, Indonesia has compiled technical guidelines for the use of mercury in lamps (lamp production and assembly) as guidelines that can be used by the lighting industry in applying Mercury on their product, and use the guidelines as BAT and BEP.

4.5. Has the party discouraged the manufacture and the distribution in commerce of mercury–added products not covered by any known use in accordance with article 4, paragraph 6?

- Yes
- No

If no, has there been an assessment of the risks and benefits of the product that demonstrates environmental or health benefits? Has the party provided to the secretariat, as appropriate, information on any such product?

- Yes
- No
Part E – Additional comments on the article in free text if the party chooses to do so

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ART. 5: MANUFACTURING PROCESSES IN WHICH MERCURY OR MERCURY COMPOUNDS ARE USED

5.1. Are there facilities within the territory of the party that use mercury or mercury compounds for the processes listed in Annex B of the Minamata Convention in accordance with paragraph 5 of article 5 of the Convention?

- Yes
- No
- I do not know

If yes, please provide information on measures taken to address emissions and releases of mercury or mercury compounds from such facilities.

There is a company in Indonesia that still uses Mercury in the chlor-alkali production process which was established in 1973 and operated in 1975 with mercury cell technology. Since its establishment until now, no mercury has been added to the close loop system operation. Periodic checking of mercury content is carried out at regular intervals and recorded. It is known that the operation is carried out at low temperatures (60–70°C) and the production capacity is below the installed capacity (4,000 tons/year) to avoid operating at high temperatures that can trigger mercury evaporation.

If available, please provide information on the number and type of facilities and the estimated annual amount of mercury or mercury compounds used in those facilities.

Indonesia still have 1 (one) Chlor alkali facilities. Since its establishment until now, no mercury has been added to the close loop system operation. Periodic checking of mercury content is carried out at regular intervals and recorded. The average mercury used is 12,500 mg to 14,800 mg per cell.

Please provide information on how much mercury (in metric tons) is used in the processes listed in the two first entries of Part II of Annex B in the last year of the reporting period.

No manufacturer in existence.

5.2. Are measures in place to not allow the use of mercury or mercury compounds in manufacturing processes listed in Part I of Annex B after the phase-out date specified in that Annex for the individual process?

- Yes
- No
- Not applicable (do not have these facilities)

If yes, please provide information on these measures.

Socialization has been carried out to the Company regarding the schedule for the phase-out of mercury in the chlor-alkali industry in 2025. The company is committed to following all Indonesian Government policies, one of which is to use alternatives technology from the chlor-alkali process using mercury cells to technology that does not use mercury, but is still constrained
by the investment required for small capacity. Therefore, the company is expected to stop its production in 2025 (deadline phase out of Mercury in the Chlor-Alkali industry).

### ACETALDEHYDE PRODUCTION IN WHICH MERCURY OR MERCURY COMPOUNDS ARE USED AS A CATALYST

- [ ] Yes
- [ ] No
- [ ] Not applicable (do not have these facilities)

### VINYL CHLORIDE MONOMER PRODUCTION

- [ ] Yes
- [ ] No
- [ ] Not applicable (do not have these facilities)

### SODIUM OR POTASSIUM METHYLATE OR ETHYLATE

- [ ] Yes
- [ ] No
- [ ] Not applicable (do not have these facilities)

### PRODUCTION OF POLYURETHANE USING MERCURY–CONTAINING CATALYSTS

- [ ] Yes
- [ ] No
- [ ] Not applicable (do not have these facilities)

5.4. Is there any use of mercury or mercury compounds in a facility using the manufacturing processes listed in Annex B that did not exist prior to the date of entry into force of the Convention for the party?

- [ ] Yes
- [ ] No
5.5. Is there any facility that has been developed using any other manufacturing process in which mercury or mercury compounds are intentionally used that did not exist prior to the date of entry into force of the Convention?

- Yes
- No

Part E – Additional comments on the article in free text if the party chooses to do so

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▼ ART. 7: ARTISANAL AND SMALL–SCALE GOLD MINING

7.1. Have steps been taken to reduce, and where feasible eliminate, the use of mercury and mercury compounds in, and the emissions and releases to the environment of mercury from, artisanal and small–scale gold mining and processing subject to article 7 within your territory?

- Yes
- No
- There is no artisanal and small–scale gold mining and processing subject to article 7 in which mercury amalgamation is used in the territory

If yes, please provide information on the steps.
Indonesia has taken steps to eliminate the use of Mercury in ASGM starting in 2018 by:
- Establishment of a National Action Plan for the Elimination of Mercury
- Establish a policy to prohibit the use of mercury in gold processing
- Acceleration of community mining formalization
- Introduction of non–mercury technology alternatives

Based on the evaluation of the effectiveness of the abovementioned elimination measures, it was found that 5 ASGM sites have not used mercury anymore since 2019. Therefore, the number of ASGM sites that uses mercury has been reduced by 5 out of 180 targeted sites.

7.2. Has the party determined and notified the secretariat that artisanal and small–scale gold mining and processing within its territory is more than insignificant?

- Yes
- No

7.3. Has the party developed and implemented a national action plan and submitted it to the secretariat?

- Yes
- No
- In progress
7.4. Attach your most recent review that must be completed under paragraph 3 (c) of article 7, unless it is not yet due

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7.5. Supplemental: Has the party cooperated with other countries or relevant intergovernmental organizations or other entities to achieve the objective of this article?

- Yes
- No

Please provide information

For the ASGM sector, cooperation has been carried out with the United Nations Development Program in the context of accelerating the formalization of smallholder mining and increasing establishment of the capacity building of miners in the ASGM sector in order to use non-mercury alternative technology for processing gold. The UNDP project was implemented in 6 ASGM locations including Yogyakarta, West Nusa Tenggara, Gorontalo, North Sulawesi, North Maluku and Riau.

Please provide information

Part E – Additional comments on the article in free text if the party chooses to do so

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▼ ART. 8: EMISSIONS

8.1. Identify any Annex D source categories for which there are new sources of emissions of mercury or mercury compounds as defined in paragraph 2 (c) of article 8.

For each of those source categories describe the measures in place, including the effectiveness of such measures, to implement the requirements of paragraph 4 of article 8.

- Coal-fired power plants
- Coal-fired industrial boilers
- Smelting and roasting processes used in the production of non-ferrous metals
- Waste incineration facilities
- Cement clinker production facilities

Has the party required the use of best available techniques or best environmental practices (BAT/BEP) to control and where feasible reduce emissions for new sources no later than 5 years after the date of entry into force of the Convention for the party?

- Yes
- No

Please explain
8.2. Identify any Annex D source categories for which there are existing sources of emissions of mercury or mercury compounds as defined in paragraph 2 (e) of article 8.

For each of those source categories, select and provide details on the measures implemented under paragraph 5 of article 8 and explain the progress that these applied measures have achieved in reducing emissions over time in your territory:

**COAL-FIRED POWER PLANTS**

- A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- Emission limit values for controlling and, where feasible, reducing emissions from relevant sources
- Use of BAT/BEP to control emissions from relevant sources
- Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions
- Alternative measures to reduce emissions from relevant sources

**Measures**
1. The emission standard for Hg parameter has been set out under the Regulation of the Minister of Environment and Forestry Number 15 of 2019 concerning Quality Standards for Thermal Power Plant Emissions
2. Some of CFPP in Indonesia has implemented High Efficiency and Low Emissions (HELE) technology to reduce mercury emissions, especially in Java Island
3. All of CFPPs have been installed with emission reduction technologies, such as particulate removal (ESP, Fabric/Bag Filter), and desulfur technology, and it would help to reduce Hg emission in CFPP as well (as a co benefit)
4. As much as 198 company had been reported the mercury emission in 2020, and 208 company had been reported the emission in 2021 with total emission 4,4 ton/year and 4,49 ton/year respectively.

**Progress**
According to Presidential Regulation No. 21 of 2019 concerning the National Action Plan for Mercury Reduction and Elimination (RAN PPM), for energy sector priority in 2025, there will be implementation of BAT/BEP guidelines for controlling mercury emissions from coal–fired boilers in power plants, so before 10 years Convention entry into the force, Indonesia has already BAT/BEP document.

**COAL-FIRED INDUSTRIAL BOILERS**

- A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- Emission limit values for controlling and, where feasible, reducing emissions from relevant sources
- Use of BAT/BEP to control emissions from relevant sources
Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions

Alternative measures to reduce emissions from relevant sources

Measures
Monitoring of emission in Coal–fired industrial boilers carried out by direct and electronic (online reporting system) monitoring.

Progress
Indonesia have some regulation to monitor the hazardous substance emission such as:

- Regulation of the Minister of Environment and Forestry Number 15 of 2019 concerning Quality Standards for Thermal Power Plant Emissions
- Regulation of the Minister of Environment and Forestry Number 1 of 2021 concerning Program for Company Performance Ratings in Environmental Management.
- Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number 87 of 2016 concerning the Electronic Licensing Reporting System for the Environmental Sector for Businesses and/or Activities
- Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number 6 of 2021 concerning Procedures and Requirements for Management of Hazardous Waste

Smelting and Roasting Processes Used in the Production of Non–Ferrous Metals

A quantified goal for controlling and, where feasible, reducing emissions from relevant sources

Emission limit values for controlling and, where feasible, reducing emissions from relevant sources

Use of BAT/BEP to control emissions from relevant sources

Multi-pollutant control strategy that would deliver co–benefits for control of mercury emissions

Alternative measures to reduce emissions from relevant sources

Measures
Monitoring of emission in Smelting and roasting processes used in the production of non–ferrous metals carried out by direct and electronic (online reporting system) monitoring.

Progress
Indonesia have some regulation to monitor the hazardous substance emission such as:

- Regulation of the Minister of Environment and Forestry Number 1 of 2021 concerning Program for Company Performance Ratings in Environmental Management.
- Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number 87 of 2016 concerning the Electronic Licensing Reporting System for the Environmental Sector for Businesses and/or Activities
- Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number 6 of 2021 concerning Procedures and Requirements for Management of Hazardous Waste

Waste Incineration Facilities

- Regulation of the Minister of Environment and Forestry Number 15 of 2019 concerning Quality Standards for Thermal Power Plant Emissions
- Regulation of the Minister of Environment and Forestry Number 1 of 2021 concerning Program for Company Performance Ratings in Environmental Management.
- Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number 87 of 2016 concerning the Electronic Licensing Reporting System for the Environmental Sector for Businesses and/or Activities
- Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number 6 of 2021 concerning Procedures and Requirements for Management of Hazardous Waste
Cement clinker production facilities

A quantified goal for controlling and, where feasible, reducing emissions from relevant sources

Emission limit values for controlling and, where feasible, reducing emissions from relevant sources

Use of BAT/BEP to control emissions from relevant sources

Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions

Alternative measures to reduce emissions from relevant sources

Measures

1. Monitoring of emission in cement clinker production facilities carried out by direct and electronic (online reporting system) monitoring.
2. As much as 28 companies had been reported the mercury emission in 2020, and 25 companies had been reported the emission in 2021 with total emission 0.5 ton/year and 1.32 ton/year respectively.

Progress

Indonesia have some regulation to monitor the emission from hazardous substance such as:
- Regulation of the Minister of Environment and Forestry Number 1 of 2021 concerning Program for Company Performance Ratings in Environmental Management.
- Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number 87 of 2016 concerning the Electronic Licensing Reporting System for the Environmental Sector for Businesses and/or Activities
- Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number 6 of 2021 concerning Procedures and Requirements for Management of Hazardous Waste
Have the measures for existing sources under paragraph 5 of article 8 been implemented no later than 10 years after the date of entry into force of the Convention for the party?

- Yes
- No

8.3. Has the party prepared an inventory of emissions from relevant sources within 5 years of entry into force of the Convention for it?

- Yes
- No
- Have not been a party for 5 years

If yes, when was the inventory last updated?
Wed, 06/30/2021 - 00:00

Please indicate where this inventory is available
Indonesia has already conducted an inventory of emissions from relevant sources following the procedure and methods provided in the UNEP Toolkit.
In conducting an inventory of mercury emissions from the private sector, Indonesia also has the SIMPEL (Online Reporting Information System) application.

Hereby the attach link for mercury inventory: https://simpel.menlhk.go.id/2018/landing
Website is available only in Bahasa.

Attach
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8.4. Has the party chosen to establish criteria to identify relevant sources covered within a source category?

- Yes
- No

8.5. Has the party chosen to prepare a national plan setting out the measures to be taken to control emissions from relevant sources and its expected targets, goals and outcomes?

- Yes
- No

If yes, has the party submitted its national plan to the Conference of the Parties under this article no later than 4 years after the date of entry into force of the Convention for the party?

- Yes
- No

Please explain
Indonesia had had a NAP to reduce and eliminate Mercury since 2019 which is stated in Presidential Regulation No. 21 of 2019 concerning the National Action Plan for Mercury Reduction and Elimination.
However, the NAP has not been officially presented at the Conference of the Parties.

Part E – Additional comments on the article in free text if the party chooses to do so
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▼ ART. 9: RELEASES

9.1. Are there, within the party’s territory, relevant sources of releases as defined in paragraph 2 (b) of article 9?

☐ Yes
☐ No
☐ I do not know

9.2. Has the party established an inventory of releases from relevant sources within 5 years of entry into force of the convention for it?

☐ Yes
☐ Relevant sources do not exist in the territory
☐ Have not been a party for 5 years
☐ No

Please explain
Indonesia will start conducting a releases inventory in 2023. This is also in accordance with Indonesia’s domestic regulations, namely Presidential Regulation No. 21 of 2019 concerning the National Action Plan for Mercury Reduction and Elimination (RAN PPM). Currently, Indonesia is just starting to conduct an inventory for the estimation of releases through the UNEP Toolkit.

Part E – Additional comments on the article in free text if the party chooses to do so
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▼ ART. 10: ENVIRONMENTALLY SOUND INTERIM STORAGE OF MERCURY, OTHER THAN WASTE MERCURY

10.1. Has the party taken measures to ensure that the interim storage of non–waste mercury and mercury compounds intended for a use allowed to a party under the Convention is undertaken in an environmentally sound manner?

☐ Yes
☐ No
☐ I do not know
Please indicate the measures taken to ensure that such interim storage is undertaken in an environmentally sound manner and the effectiveness of those measures. Monitoring of Mercury (other than waste) has been carried out. Also, it has been confirmed that the interim storage of mercury has been carried out in an environmentally sound manner. In general, Mercury (other than waste) that had been stored is used as a raw material in the manufacture of lamps, chlor-alkali facilities, and as a research reagent in laboratories.

Part E – Additional comments on the article in free text if the party chooses to do so

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ART. 11: MERCURY WASTES

11.1. Have measures outlined in article 11, paragraph 3, been implemented for the party’s mercury waste?

- Yes
- No

Please describe the measures implemented pursuant to paragraph 3, and please also describe the effectiveness of those measures.
Yes, Indonesia as a country that has ratified the Minamata Convention has carried out Hazardous Waste Management containing mercury produced domestically. The steps taken in detail will be described in line with compliance with Article 11 of the Minamata Convention on Mercury

11.2. Are there facilities for final disposal of waste consisting of mercury or mercury compounds in the party’s territory?

- Yes
- No
- I do not know

Part E – Additional comments on the article in free text if the party chooses to do so

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ART. 12: CONTAMINATED SITES

12.1. Has the party endeavoured to develop strategies for identifying and assessing sites contaminated by mercury or mercury compounds in its territory?

- Yes
- No
Please elaborate
Strategies for Identification and Assessment of Mercury Contaminated Sites that have been carried out by Indonesia include:
A. Development of Regulatory Devices
B. Development of Database System
C. Implementation of the Identification and Inventory of Mercury Contaminated Sites
D. Preparation of National Priorities for the Recovery of Mercury Contaminated Sites
E. Preparation of a Roadmap for the Handling of Mercury Contaminated Sites
F. Socialization on the Handling of Mercury Contaminated Sites

Part E – Additional comments on the article in free text if the party chooses to do so
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▼ ART. 13: FINANCIAL RESOURCES AND MECHANISM

13.1. Has the party undertaken to provide, within its capabilities, resources in respect of those national activities that are intended to implement the Convention in accordance with its national policies, priorities, plans and programmes?

☐ Yes
☐ No

Please specify
Indonesia has provided financial support for the implementation of the Convention, including:
1. Procurement of laboratory equipment, manufacture of pilots and non-mercury gold processing plants design, and establish pilot projects. The plant design was made for Pacitan, Lebak, Banyumas, Kulonprogo, Kuantan Sengingi Riau locations. From these designs, several pilot plants have been establish in Lebak, Kulonprogo, Kuantan Sengingi.
2. manufacture of containers for storage of confiscated elemental mercury from ASGM, and mercury medical devices withdrawn from health care facilities (sphygmomanometer and thermometer).
3. establish an application to monitor the journey of mercury medical devices from the source of withdrawal, to the final storage.
4. Financial support issued in efforts to implement mercury reduction and elimination in 2017 was worth 90,000 USD, in 2018 it was worth 393,000 USD, in 2019 it was 379,000 USD, in 2020 it was 70,000 USD, in 2021 it was 105,000 USD.
5. Development of Detection Technology and Mercury Waste Management
6. Provision of research funding related to mercury in 2021 in the amount of 300 million rupiah (part of the National Priority for Clean Technology Innovation and Instrumentation)

Please provide comments, if any.
{Empty}

13.2. Supplemental: Has the party, within its capabilities, contributed to the mechanism referred to in paragraph 5 of article 13?

☐ Yes
☐ No

Please specify
Indonesia has provided adequate funding sources as an effort to implement the reduction and elimination of Mercury. The source of these funds comes from the State Budget, District Budget, and cooperation with other international organizations and donor countries.

Please provide comments, if any.
{Empty}

13.3. Supplemental: Has the party provided financial resources to assist developing-country parties and/or parties with economies in transition in the implementation of the Convention through other bilateral, regional and multilateral sources or channels?

☐ Yes
☐ No

Please specify
Indonesia is currently a developing country and has not been able to provide assistance to other developing countries or countries with transition economies.

Please provide comments, if any.
{Empty}

Part E – Additional comments on the article in free text if the party chooses to do so
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1. 2021: Capacity Building for Tailor Made Courses Related to Mercury–Free Gold Processing from Department – National University Of Colombia with total contribution from Indonesia 180,930 USD
2. 2021: Research of mercury (part of the National Priority for Clean Technology Innovation and Instrumentation) from Sumitomo Foundation with total value from Interngovernmental organisation is Rp. 180,000,000 and total contribution from Indonesia Rp. 300,000,000
3. 2019: Asia–Pacific regional workshop on the reduction of mercury emission from coal combustion from Minamata Convention Secretariat with total value US$ 45,930
5. 2017 – 2023: Integrated Sound Management of Mercury in Indonesia’s Artisanal and Small–Scale Gold Mining (ISMIA) Project with total value US$ 6,720,000
6. 2015 – 2020: Sustainable Development of the Artisanal Small–scale Gold Mining (ASGM) in Indonesia from Govt. Of Canada/AGC with total value CAD 8,524
7. 2019 – 2021: Development of Capacity for the Substitution and the Environmentally Sound Management (ESM) of Mercury–containing Medical Measuring Devices from Japan–ASEAN Integration Fund (JAIF) with total value US$ 93,400
8. 2020 – 2022: Improving Health Risk Control of Mercury Exposure in Artisanal and Small–Scale Gold Mining (ASGM) and Surrounding Areas by Developing the "Participatory Approach" Model from Specific International Program Minamata Convention with total value US$ 143,340
9. 2020 – 2023: Capacity Building in Indonesia to Reduce Mercury Emissions from the Coal Combustion Sector from Department of State, USA with total value US$ 485,000.

Please provide comments, if any.

{Empty}

14.3. Has the party promoted and facilitated the development, transfer and diffusion of and access to, up-to-date environmentally sound alternative technologies?

☐ Yes
☐ No
☐ Other

Please specify
Indonesia has promoted and facilitated the development, transfer and diffusion of, and access to, up-to-date environmentally sound alternative technologies antara lain:
1. 2019 – transfer of mercury–free gold processing technology using cyanidation and gravity methods which are much more environmentally friendly in ASGM sector in 6 location (Gorontalo, Kuantan Singingi, Minahasa Utara, Lombok Barat, Halmahera Selatan, Kulon Progo) – information regarding the activity can be accessed through website https://ptpsm.bppt.go.id
3. 2021 – promoting mercury–free gold processing technology through the Indonesia Japan Environmental Week bilateral event – Information regarding the activity can be accessed through website https://www.oecc.or.jp/jprsii/event/ enweek/en/index.html
4. 2021 – As a speaker regarding Mercury inventory in Indonesia in Training programme "mercury inventory and material flow analysis" under the project for promoting minamata convention on mercury by making the most of Japan’s knowledge and experiences.

Part E – Additional comments on the article in free text if the party chooses to do so
ART. 16: HEALTH ASPECTS

16.1. Have measures been taken to provide information to the public on exposure to mercury in accordance with paragraph 1 of article 16?

- Yes
- No

Supplemental: If yes, describe the measures that have been taken.
- There is an occupational health program based on the risk of exposure in the industrial activity. In ASGM, direct education is provided to ASGM workers in several locations. With the establishment of the Occupational Health Effort (UKK) post, it is hoped that efforts to increase knowledge (education) for ASGM workers can be carried out properly and regularly.
- Education and socialization regarding the dangers of mercury exposure from the health facilities and from ASGM activities targeting the community, health workers, and stakeholders, is carried out by the government (starting 2022), through funding from the central government.
- Monitoring of environmental quality and human mercury exposure carried out by BBTKL PP in several ASGM locations
- Availability of guidelines for the implementation of participatory approaches and diagnosis

16.2. Have any other measures been taken to protect human health in accordance with article 16?

- Yes
- No

Supplemental: If yes, describe the measures that have been taken.
- Capacity building of health workers with funding from SIP Minamata to apply a participatory approach, conduct environmental health risk analysis, and early diagnosis/detection of mercury exposure in 3 locations, and is expected to be a model that could be applied in other locations
- Conducted mercury testing in various matrices, conducted by BBLK Jakarta. In particular the human matrix.

Part E – Additional comments on the article in free text if the party chooses to do so

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ART. 17: INFORMATION EXCHANGE

17.1. Has the party facilitated the exchange of information referred to in article 17, paragraph 1?

- Yes
- No
Indonesia has facilitated several information exchange activities, including:

3. Socialization about the dangers of mercury with UNDP to the mining community and through the GOLD ISMIA social media channel in 2021. This socialization media can be accessed through https://youtube.com/c/GOLDISMIA.
4. Socialization on cyanidation method technology in gold processing to reduce and eliminate mercury use in ASGM by 2021. This socialization media can be accessed through https://youtube.com/c/GOLDISMIA.
8. Patent which has been registered with the title: Method of analysis of mercury in sediments using the reductant of natrium borohydride, with registration number S00202106097.

Part E – Additional comments on the article in free text if the party chooses to do so

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ART. 18: PUBLIC INFORMATION, AWARENESS AND EDUCATION

18.1. Have measures been taken to promote and facilitate the provision to the public of the kinds of information listed in article 18, paragraph 1?

☐ Yes

☐ No

If yes, please indicate the measures that have been taken and the effectiveness of those measures

Indonesia has promoted and facilitated the provision of information to the public among others through:

1. Training on non-mercury gold processing and waste management in Kulonprogo, Yogyakarta:
   a. In 2019, the participants were 40 miners and gold mining entrepreneurs from their areas of origin.
   b. In 2020, with 20 participants from South Halmahera, North Gorontalo, West Lombok, Kulonprogo and North Minahasa
   c. In 2021, with 20 participants from South Halmahera, North Gorontalo, West Lombok, Kulonprogo and North Minahasa.
2. Inventory of avoidable mercury in the ASGM sector through the "Jari Emas (golden finger)" application starting in 2021.
3. Carry out formalization training regarding the making of people's mining area, people's mining permit, cooperatives, and mining license for ASGM in 2021.
4. Socialization and education for health workers in several ASGM locations
ART. 19: RESEARCH, DEVELOPMENT AND MONITORING

19.1. Has the party undertaken any research, development and monitoring in accordance with paragraph 1 of article 19?

☐ Yes
☐ No

If yes, please describe these actions

Indonesia has conducted a number of research as well as monitoring in accordance with Paragraph 1 of Article 19. Some of the publications that have been carried out regarding mercury. There are 81 publications could be found in international journals, international proceedings, national journals, and national proceedings. 28 publications received international funding, such as National Geographic, Artisanal Gold Council from Global Affairs Canada, Japan Society for the Promotion of Science, European Commission, Research Institute for Humanity Nature, Geological Society of America, Tokyo Institute of Technology, European Union’s Seventh Programme, European Union with UNIDO, Australian Research Council, University of Edinburgh (United Kingdom), UNIDO under Global Mercury Project – GEF, US Department of States, University of Shiga Prefecture, and John D. MacArthur Professorship – the Graham Environmental Sustainability Institute. International funding shows that the research has been peer reviewed by international partners thereby increasing the level of data comparability.

Of other 20 publications that received national funding, only 4 publications have presented the results of quality assurance or quality control (QA / QC). QA/QC indicates that the data in the publication has gone through a quality checking process so that the quality is guaranteed. Therefore, in the future, we need to promote national efforts to ensure the quality of mercury testing through regular proficiency testing and the provision of certified reference materials (CRM).

Indonesia has also monitored and developed several application systems, including:
1. Monitoring for Inventory of mercury use in ASGM – Bayah District – 2019
2. Development of mercury interim storage and mercury containers as storage facilities for mercury and mercury-containing products – 2021
3. Development of Mercury Information System (Mercury refers to products containing mercury that have been recalled in Indonesia (medical devices containing Mercury)) – 2021
4. Development of a golden finger application – Aims for an inventory of mercury that has been avoided in the ASGM sector – 2021
5. Development of individual scale and pilot scale mercury-free gold processing technology that will be utilized by ASGM in Indonesia – Cooperating with GOLD ISMIA – 2021
6. Development of BAT, BEP, and DED for the manufacture of Small Mobile Plants and Fixed Plants that will be used in mercury-free gold processing technology – Cooperating with GOLD ISMIA – 2021
7. Development of reprocessing amalgam tailings used by ASGM to reduce mercury use – 2021
Part C: Comments regarding possible challenges in meeting the objectives of the Convention (Art. 21, para. 1)

a. Indonesia is still having difficulties in conducting research and implemented alternative technologies for non-mercury and non-cyanide gold processing. Alternative technology for non-mercury gold processing was gravity concentration and cyanide leaching;
b. The need for large funding to maintain the continuity of monitoring mercury emission in some type of private sector;
c. Indonesia has many sites as source of mercury that requires close supervision in order to not being used for illegal mining and other activities;
d. Indonesia does not have facilities for final disposal of waste mercury and other waste consisting of Mercury or Mercury compounds. Sound management of mercury waste is needed, especially to monitor Mercury in the storage;
e. As an archipelagic states, Indonesia has many jetty/small ports which is vulnerable to any illegal trade activities. Law enforcement faces new challenges every day and cooperation among parties need to be enhanced to create innovative solutions in preventing illegal Mercury trading in small ports;
f. The way to handle Mercury-contaminated land that has occurred in several areas.

Supplemental: Part D: Comments regarding the reporting format and possible improvements, if any

• In question 4.5, this question needs to be redesigned to give respondents the opportunity to explain the type of mercury added product in question exists or not in a country.
• In question 3.3, it is necessary to clarify the explanation of the individual stock of mercury and the source of mercury, whether it includes sources from legal or illegal.