



**United Nations
Environment
Programme**

**UNEP Global Mercury Partnership
Advisory Group
Twelfth meeting**
Virtual meeting, 11 and 14 March 2022

**Report of the Twelfth meeting of the Global Mercury
Partnership Advisory Group (11 and 14 March 2022)**

Item 1

Opening of the meeting

1. The twelfth meeting of the UNEP Global Mercury Partnership Advisory Group (PAG 12) was held virtually on 11 and 14 March 2022. The meeting was opened on 11 March 2022 at 12:30 p.m. CET by Ms. Monika Gail MacDevette (Chief of the Chemicals and Health Branch, UNEP) on behalf of the Secretariat of the Global Mercury Partnership (hereinafter referred to as the “Partnership”).
2. In her opening remarks, Ms. Gail MacDevette welcomed members of the PAG to their twelfth meeting and acknowledged efforts of Governments, Intergovernmental Organisations, Non-governmental Organisations, industry and academia all around the world to make mercury history. She extended UNEP’s gratitude to the PAG co-chairs, Mr. Rodges Ankrah (United States of America) and Ms. Teeraporn Wiriwutikorn (Thailand), for their support, guidance and active involvement in the Partnership’s work and acknowledged the key role of Partnership area leads and partners. She expressed her pleasure to witness the progress made in supporting actions to reduce the impacts of mercury on human health and the environment, including but not limited to, the development of studies on mercury from non-ferrous metals and from oil and gas, the support to work for the fourth meeting of the Conference of the Parties to the Minamata Convention (COP4) in close collaboration with the Convention Secretariat, in relation to customs codes and artisanal and small-scale gold mining (ASGM) with guidance on the management of mercury containing tailings and targeted awareness raising actions undertaken on a number of key topics. She welcomed Mr. Zaigham Abbas (Pakistan) as new co-lead of the Partnership area on mercury releases from the cement industry. She reaffirmed the commitment of UNEP to support the Partnership, which she noted was an inspiring example of how voluntary networks could support a legally binding instrument and constituted valuable pool of expertise and platform of cooperation between a wide range of stakeholders. Looking forward, she invited all participants to engage in the discussions, including on the next steps of the cross-cutting studies and future priorities, and continue to develop fruitful collaboration and join forces in the context of the Partnership. Finally, she warmly welcomed the participation of Ms. Monika Stankiewicz, Executive Secretary of the Minamata Convention, highlighting the focus of the Partnership towards meaningful and sustainable implementation of the Convention. She concluded by wishing all a very successful meeting.
3. Ms. Stankiewicz reiterated her appreciation to the Partnership, thanking the co-chairs, co-leads all partners and the Secretariat. She noted with appreciation the presence of the co-chairs and several participants at the upcoming COP4.2 in Bali, Indonesia. Ms. Stankiewicz highlighted the importance of the close collaboration between the Minamata Secretariat and the Partnership which she hoped would

continue and even further increase in the future. She noted the upcoming COP4.2 would benefit greatly from contribution of the Partnership on a number of key topics previously mentioned (custom codes, guidance on the management of mercury containing ASGM tailings) as well as through the contribution of members to intersessional work. She also commended the way Partnership areas collaborate with countries and communities all over the world to implement the Convention. Looking forward, she underscored the unique ability of the Partnership to draw upon expertise in a coordinated manner, as well as its strong engagement in a number of GEF projects and programmes. The Specific International Programme had also greatly benefitted from the involvement of the Partnership Secretariat in the appraisal process of applications. She also noted the Partnership was able to address evolving and newly understood needs in a nimble and flexible way and encouraged continued efforts by partners and Partnership areas to promote solution-based approaches to the challenges of reducing mercury pollution and risks. She concluded by calling for mutual support to navigate possibilities to engage other programmes, leverage, and maximize our results at a time of global focus on integration with biodiversity, climate change, chemicals and waste.

4. After warmly welcoming all co-leads, nominees, observers to the PAG, the co-chairs expressed their gratitude for stakeholders' flexibility given the various time zones, for the present meeting but also the various meetings and events organized over the last two years. Following her welcoming words, Ms. Wiriwutikorn presented the objectives of PAG-12 to take stock of progress made, including on a number of issues identified at previous meetings, and discuss ways the Partnership could continue to help advance the mercury agenda, exchanging on priorities and plans for future work. After highlighting the active role of partners in the implementation of the Minamata Convention through reducing mercury pollution, improving global understanding of mercury in the environment and exploring new ways to reduce mercury use, she conveyed the co-chairs' appreciation to all leads for the considerable work and dynamism despite the current context. She concluded by congratulating and welcoming Mr Abbas as new co-lead, extending deep appreciation to the Government of Sweden for its financial contribution to the Partnership, and wishing a good-spirited and open discussion.

Item 2

Organizational matters

(a) Adoption of the agenda

5. After the presentation of the agenda by the Secretariat of the Partnership, the PAG adopted the agenda for its meeting on the basis of the provisional agenda set out in document UNEP/Hg/PAG.12/1.

(b) Organization of work

6. The PAG agreed on the organization of work for its meeting as presented in the annotations to the provisional agenda set out in document UNEP/Hg/PAG.12/2.

Item 3

Key findings from the study reports initiated in follow up to the tenth meeting of the Partnership Advisory Group, followed by discussions on way forward and possible next steps

7. Introducing the agenda item, Mr. Ankrah reminded the PAG about the origin and process for developing the study reports following the decision of PAG-10 (November 2019) to initiate work on mercury from non-ferrous metals mining and smelting and from oil and gas. Expert consultations had taken place in April 2020 with interested partners and stakeholders, following which Partnership area leads had agreed to guide a process for developing study reports. Draft annotated outlines had been considered by PAG-11 (December 2020). Together with the information collected, the finalized outlines were used as a basis to develop draft study reports, which were subsequently made available for written comments and input. Expert consultations had also been held in April and May 2021. The revised drafts of the study reports had subsequently been shared with the groups of experts for any last major comment.

8. The study reports (final pre-print version for the report on non-ferrous metals and latest draft for the report on oil and gas) were presented to the PAG in documents UNEP/ Hg/PAG.12/4 and UNEP/ Hg/PAG.12/5.

9. Mr. Ankrah acknowledged the important work of the lead authors, Mr. Peter Nelson (Macquarie University), and Ms. Lilian Corra (International Society of Doctors for the Environment – ISDE), as

well as of all individuals and organizations having contributed, including the co-leads of the Partnership areas for their valuable guidance.

10. He finally highlighted the objective of the agenda item to exchange and gather ideas on the way forward and possible next steps, including where the Partnership may provide further useful contributions to help advance the issues.

(a) Mercury from non-ferrous metals mining and smelting

11. Mr. Peter Nelson, lead author of the study report on mercury from non-ferrous metals mining and smelting, provided an overview of the process for developing the report and highlighted major findings and areas where further work may be needed. He also expressed his appreciation for the various contributions received.

12. He recalled the overall objective, which, as per the guidance received by the Partnership area leads, was to provide a better understanding of the mercury mass balance globally between supply, storage, and waste treatment related to non-ferrous metals mining and smelting operations. He also indicated the report development had benefitted from experts and relevant stakeholders' input, of open access sources of information, including published reports and toolkits, websites and peer reviewed scientific research literature. The report had adopted a particular focus on the four metals covered under Annex D of the Minamata Convention, namely copper, lead, zinc and large-scale gold.

13. In outlining the content of the report, he explained that it consisted of a critical review of existing knowledge and information gaps on mercury, featuring methods used for reducing mercury emissions and releases and managing mercury disposal at different stages of the mining and smelting processes, five detailed cases studies on the management of mercury from different locations provided by the industry groups, as well as suggestions for further work, including capacity development.

14. Turning to key findings, Mr. Nelson highlighted that the non-ferrous sector was estimated to be a large source of emissions and releases of mercury to the environment. It was estimated to be the third largest source of emissions to air, with about 10 to 15% of total emissions. Estimates from the industry are however significantly lower based on direct reports from smelters around the world, and this difference needs to be further investigated. The sector was also the second largest source of releases to water with about 40% of total releases, mostly from large scale gold production. Releases to land and waste production from the sector were estimated to be even larger, although subject to important uncertainties. The sector, which was expected to grow considerably in the next thirty years, also represented a large source of mercury supply, accounting for around 15% of the total.

15. In terms of knowledge gaps, Mr. Nelson noted in particular the following key areas for further investigation:

- mercury content in ores and concentrates, at plant and country levels;
- mercury air emissions test data;
- mercury concentrations in rejected materials such as tailings;
- mercury distribution between emissions and others releases;
- activity data, in terms of amounts of ores and concentrates processed;
- effects of pollution control technologies, including on distribution of mercury between emissions to air and capture in solid and liquid waste;
- additional qualitative information on how mercury departs to emissions and releases to air, land, water, waste and by-products.

16. He also highlighted a number of identified needs, which related in particular to:

- effective and sustainable solutions for mercury secure and long-term storage;
- research and development on improvements to mineral processing,
- mercury fate during mining and smelting, and further sharing of best practices and case studies.

17. In the ensuing discussion, participants exchanged on ways in which the Partnership could contribute further to the topic. Responding to a question on which metals were the largest contributors in terms of emissions and releases of mercury and hence could benefit from future research and work, Mr. Nelson indicated the metals listed under the Convention were all significant sources. The discrepancies between estimates from the industry and some other findings from the report were also discussed and highlighted the need for further exploration of the reasons for such differences and data gaps. Regional differences in estimated emissions and releases were also highlighted. Strengthened collaboration under the Partnership with the industry from the sector was also suggested in order to further enhance the collection of relevant and accurate data.

(b) Mercury from oil and gas

18. Ms. Lilian Corra, lead author, shared key findings of the study report on mercury from the oil and gas sector. She highlighted interest and active participation from various stakeholders in the development of the report, and thanked the team, co-chairs, co-leads of Partnership areas and the Partnership Secretariat for their contributions.

19. She recalled the objective of the study report, which was to better understand potential releases of mercury from oil and gas at different stages of the process, including in the decommissioning of oil and gas infrastructures, and how the wastes from the sector were treated and accounted for, and may be entering the market for other uses. Turning to current knowledge identified, she pointed out the variation of mercury in oil and gas depending on the origin and operation conditions, the complex treatment of mercury containing waste from the sector, as well as the limited information available on the processes and uses. Ms. Corra then provided an overview of each section of the report.

20. Ms. Corra highlighted key recommendations for further work, notably towards a more detailed assessment of mercury emissions and releases from the sector, an effective implementation of measures to reduce mercury emissions and releases, and the development and dissemination of guidelines to support the implementation of best available technologies and best environmental practices for the removal of mercury from oil and gas throughout the entire process, along with best practices to improve workers' protection. She concluded by reiterating her thanks for all contributions from partners and relevant stakeholders with expertise in the sector.

21. Participants subsequently discussed, amongst others, whether and if so how much mercury from the oil and gas and the non-ferrous metals sectors may be a source of mercury supply used in artisanal and small-scale gold mining. They exchanged on mercury waste management and the removal of mercury from the crude oil, as well as the importance of further considering flaring activities happening in the sector as well as measurement of mercury emissions. Exchanges also touched upon the management of waste and their transboundary movements, information related to management capacities and/or the shipping of wastes to appropriate treatment facilities that may be provided in national reporting under the Basel Convention, and further attention to workers' exposure in relation to available knowledge from the International Labour Organization.

22. In his closing remarks, Mr. Ankrah thanked both authors and the group for the rich discussion on these important topics. He noted the need to disseminate both reports and their key findings to relevant stakeholders, and to further reflect on means to address discussed concerns and priorities.

Item 4**Updates from each Global Mercury Partnership Area, including on key future work and priorities, and from the Secretariat on key activities in follow up to the eleventh meeting of the Partnership Advisory Group**

23. Introducing the agenda item, Ms. Wiriwutikorn drew attention to document UNEP/Hg/PAG.12/3, which presented the report on activities undertaken within the Partnership during the period from December 2020 to February 2022. She recalled the Partnership reporting to the Minamata Convention COP, which was available for COP-4.2 in document UNEP/MC/COP.4/INF/16/Rev.1. Ms. Wiriwutikorn finally invited area leads to provide a brief update on their respective activities and to share key highlights, future planned activities, priorities, needs identified in the context of their area of work as well as opportunities for resource mobilization.

Mercury releases from coal combustion

24. Ms. Lesley Sloss (International Centre for Sustainable Carbon - ICSC), started with an overview of a capacity building project in Indonesia and India. The project had produced a detailed unit by unit mercury emissions inventory of the entire coal fleet in Indonesia and selected three plants which are representatives of different type of plants to look in more details. A coal partnership meeting would be held in the coming months to seek for potential reduction strategies for these specific plants through partners' sites visits and assistance. Work was also ongoing in India, where the ICSC had completed and published reports on improving fleet flexibility, evaluation of emissions monitoring and potential gaps in the monitoring and reporting system established in coal plants in India. Ms. Sloss also pointed out current work on ash management and control strategies, hoping that capacity building workshops would commence soon, with a first workshop planned in June 2022.

25. Regarding planned activities, Ms. Sloss indicated that an experts' meeting in Jakarta with site visits to 3 coal units selected for mercury reduction projects would be organized this year and 12 regional workshops would be organized to deliver capacity building in India in 2022 and 2023.

26. Mr. Nelson then introduced a GEF project about to be launched, which consisted in an assessment of existing and future emissions reduction from the coal sector, with the two following components: (i) a comprehensive coal sectoral analysis, which would review scientific data on mercury/POPs/GHGs from the coal sector, trying to predict scales of mercury emissions in future years; and (ii) the synthesis of strategies, including policy guidance, for the coal sector's emissions reduction contribution. Finally, Mr. Nelson identified capacity building in India and Indonesia, knowledge sharing to replicate successful activities and outreach through online and live presentations as priorities for future work.

Mercury releases from the cement industry

27. Ms. Claude Lorea (Global Cement and Concrete Association - GCCA), started by welcoming Mr. Abbas (Pakistan), who, given his considerable experience on the Minamata Convention and mercury issue, was designated as co-lead for the Partnership area during its first annual meeting in December 2021.

28. In terms of planned activities, in parallel to the updating of the Partnership area business plan, she highlighted envisaged technical sessions, on mercury inventories covering facility level aspects, and on best practices and guidance for reducing mercury emissions from the sector. Further to short-term events, Ms Lorea discussed the broader agenda for enhancing the reduction of mercury emissions from the sector, focusing on identified priorities which included capacity building, awareness raising, monitoring, improvement of estimates, establishment of an online library or reference centre to make publicly available information on test data, technical papers and regulations, as well as exploring opportunities for synergistic efforts in addressing mercury as well as other pollutants.

Mercury waste management

29. Ms. Misuzu Asari (Ministry of the Environment, Japan), started with key highlights on activities, notably the Waste Management Area Activity Plan for the coming three years based on the needs survey conducted in 2021, the setting-up of three working groups on resource development, capacity building and awareness raising, and solution exchange, the information-sharing session on tools and technologies for treating mercury wastes, a joint webinar in collaboration with the Mercury in Products Partnership area and the updating of the "Catalogue of Technologies and Services on Mercury Waste Management".

30. As for future planned activities, the Partnership area envisioned to foster the work of the working groups through various initiatives, including the development of factsheets on the environmentally sound management of specific mercury waste streams, the compilation of a list of mercury wastes treatment facilities, the organization of webinars and information-sharing sessions, as well as the creation of a solution exchange platform.

31. Finally, identified priorities and needs included disseminating measures to prevent the generation of different kinds of mercury wastes and promoting their environmentally sound source separation, storage, collection, transportation, treatment, and disposal techniques; assisting in building capacities and improving awareness for the environmentally sound management of mercury wastes in collaboration with other Partnership areas and organizations at the global, regional, national, and local levels; identifying and providing support to specific challenges on mercury wastes management for different sectors and stakeholders, supporting the implementation of national projects for the environmentally sound management of mercury wastes and sharing experiences and lessons learned.

Mercury air transport and fate research

32. Mr. Nicola Pirrone (National Research Council - Institute of Atmospheric Pollution Research, Italy), started by highlighting contribution to a number of events under the Partnership and the Minamata Convention. Mr. Pirrone then provided an overview of the Global Observation System for Mercury (GOS4M), funded by the European Commission and led by the Institute of Atmospheric Pollution Research of the National Research Council of Italy, and which aims to develop advanced tools to merge observational data and post processing tool to support decision-making. The efforts for now were to foster and improve the capacity to promote air quality monitoring with passive air sampler. Similar to GOS4M, new monitoring sites in Africa and Latin America were going to be activated to fill the geographical gaps in terms of mercury monitoring, coverage as well as ensuring a global compatibility of the measurements.

33. Looking forward, Mr. Pirrone indicated that activities related to the testing of a new monitoring device to measure mercury levels not only in air but also in topsoil and ice would be carried out using

robot technology, allowing monitoring in remote areas. Additionally, modelling development would be continued to create tools to extract knowledge from datasets that could guide decision-making processes.

34. Mr. David Evers (Biodiversity Research Institute), co-lead of the area, presented the side event planned under COP4.2 on mercury monitoring. He then highlighted long term mercury monitoring efforts to use standardized approaches. He noted ongoing actions under projects supported by the Specific International Programme that were contributing to mercury monitoring and establishing a regional laboratory network for mercury contamination analyses. He also mentioned the development of Minamata Initial Assessments and mercury inventory data. Finally, he introduced a newly approved UNEP implemented GEF funded project on skin lightening products, to be executed by WHO and BRI with Jamaica, Gabon, and Sri Lanka in collaboration with the Mercury in Products Partnership area.

Artisanal and small-scale gold mining (ASGM)

35. Mr. Jerome Stucki (UNIDO), started with indicating 10 new partners had joined the ASGM Partnership area in 2021, bringing the total number of partners to 106. He provided an overview of main achievements on the ground in 2021, which related to ASGM formalization, multi-stakeholder approaches, capacity building and research. Regarding formalization, holistic approaches had been taken through advisory services for miners (e.g., business plans), promoting gender equality and empowering women miners, connecting miners with supply chain stakeholders, access to finance, technology transfers, national action plans (NAP) development and awareness raising.

36. Multi-stakeholder area approaches included policy advice related to NAPs and efforts to mobilize new partners, establishment and promotion of responsible supply chains, exploration of potential synergies and awareness raising. Training and education also focused on responsible mining practices. He also stressed the severe impact COVID-19 had on the ASGM sector, which generated new training needs, specifically on safety protocols related to COVID. Finally, research was promoted through studies on mercury contamination and effects on humans, as well as development and dissemination of tools, strategies and technological innovations.

37. Turning to future activities, Mr. Stucki highlighted four main actions: (i) finalize the development of NAPs and enhance experience sharing among governments; (ii) foster greater collaboration and engagement with private sector partners; (iii) act as a critical information-sharing mechanism amongst Parties to the Convention; and (iv) identify specific opportunities for collaboration with other Partnership areas (e.g., mercury supply/trade).

Mercury cell chlor-alkali production

38. Mr. Benjamin Vauter (United States of America) went through key highlights on activities and projects, including the recent Partnership area meeting in February 2022 and a mercury elimination project for the chlor-alkali sector in Mexico recently submitted to the GEF. He also mentioned a mercury elimination project in Brazil, still in the search for financing, the ongoing management of wastes from decommissioned and converted sites in Europe, as well as the revision of the Partnership area Business plan, in order to also consider secondary goals such as waste management, storage or contaminated sites management.

39. Moving forward with planned activities, Mr. Vauter indicated the continued monitoring and updating of inventory of mercury stocks, joint workshops and/or missions with the Partnership areas on supply and storage and waste management; enhancing cooperation with the Arctic Council, technical support for the implementation of the above mentioned GEF funded project in Mexico, as well as inter-regional knowledge sharing of lessons learned on the decommissioning and waste management.

40. Identified priorities for future work included assessing the extent and significance of mercury use in the pulp and paper sector; considering work with chlor-alkali facilities with mercury stocks below 50 tonnes; supporting the GEF funded project in Mexico; facilitating GEF funding for the mercury elimination project in Brazil; updating the inventory of mercury cell chlor-alkali facilities; and expanding engagement in other regions beyond Latin America.

Mercury in products

41. Mr. Thomas Groeneveld (United States of America), started by highlighting the work undertaken at the request of Minamata Convention COP3 on the development of draft guidance and information document on the use of mercury-specific customs codes to monitor import and export of mercury-added products. He reminded the PAG of the recently convened webinars, including on medical measuring devices and skin-lightening creams, a joint event on mercury-added lamps together with the mercury waste management area, and an upcoming session on dental amalgam.

42. Ms. Elena Lymberidi-Settimo (Zero Mercury Working Group), presented work in support to the phase-out of mercury-added products. In particular, she mentioned the implementation of mercury-added products phase out projects in Kenya, Ivory Coast, India, Bangladesh and the Philippines. Capacity building projects had also been carried out in African, Caribbean and Pacific countries. Work was also ongoing on skin lightening products, with a new sampling round launched, including from creams purchased through web platforms, the results of which would be available on a global database.

43. Mr. Groeneveld concluded with priorities for future work, envisaging to continue supporting efforts related to the HS codes, sharing the progress of the U.S. mercury inventory and recommendations for reducing the use of mercury in products and manufacturing processes, as well as further identification and promotion of viable, available and cost-effective alternatives to mercury-added products along with the compilation of resources on those products.

Mercury supply and storage

44. Ms. Ana García (Ministry for the Ecological Transition, Spain) highlighted two projects in Colombia, on the “Reduction of the use of mercury in communities dedicated to Artisanal and Small-scale Gold Mining” and on the “Contamination by mercury and other toxic substances and impact on human health in the populations of Atrato River basin as a consequence of mining activities” funded by Spain. She also mentioned the study report on “mercury from oil and gas”, to be published soon.

45. Future planned activities included collaboration with the industry for the environmentally sound management and storage of mercury in chlor-alkali, non-ferrous and gas production, collaboration with other Partnership areas on cross-cutting topics, namely mercury from oil and gas and mercury from non-ferrous mining and smelting as well as collaboration with parties concerned with the confiscation of mercury by local authorities, to support the identification of adequate solutions for their storage and disposal. The Partnership area also intended to update information on options available for infrastructures and techniques available for the management, storage and final disposal of surplus mercury, as well as the promotion of transparency and traceability at each step of the mercury life cycle, including to address potential illegal sources of mercury supply. A Partnership area meeting would be convened to discuss these issues in greater details.

46. Finally, she underscored the need to enhance collaboration with the private sector, address existing difficulties to manage and temporarily store mercury and collect information. She mentioned difficulties in terms of resource mobilization, but openness to ideas and possibilities to expand the work.

Secretariat of the Global Mercury Partnership

47. Ms. Stephanie Laruelle (UNEP) shared insights on activities and key highlights since PAG-11, which had taken place in December 2020. She noted that since then 21 partners, representing Governments, academia, private sector/ industry, non-governmental organizations and others had joined the Partnership, bringing to 236 the total number of partners in March 2022¹. She then announced the migration of the Partnership website to a new platform during the last quarter of 2021, also inviting the audience to share valuable resources that could be disseminated via this channel.

48. Ms. Imelda Dossou Etui (UNEP) offered an overview of recent events. These included a number of information-sharing sessions organized by the Partnership and its areas of work on various topics, Partnership areas meetings, along with contributions to Minamata Online sessions and COPs side events. Resources and information on such events were available on the Partnership website. Finally, Ms. Dossou Etui provided an overview of the Partnership newsletter and e-mailing campaigns, encouraging the PAG to share suggestions, resources and pertinent information to be circulated through these means.

Item 5

Update from the Secretariat of the Minamata Convention, including on national reporting by Parties, on the second segment of the fourth meeting of the Conference of the Parties (COP-4.2, Bali, Indonesia, 21-25 March 2022) and on projects under the Specific International Programme

49. Ms. Marianne Bailey (Secretariat of the Minamata Convention) provided a snapshot of the tentative schedule of work for COP-4.2 (21 to 25 March 2022 in Bali, Indonesia). She introduced preparations and items to be considered at the Conference and highlighted areas of collaboration with the Partnership, in particular those related to customs codes and ASGM tailings management.

¹ The list of partners may be found at: www.unep.org/globalmercurypartnership/partners

50. Ms. Bailey then offered an overview of the national reporting under the Convention pursuant to article 21, noting the submission rate was around 73 percent as of February 2022 for the full reports that were due at the end of 2021. COP-4.2 would consider a report on the first short reports (UNEP/MC/COP.4/16), covering reporting performance, information contained in submitted reports as well as overall comments by the Secretariat; draft guidance on completing the national reporting format (UNEP/MC/COP.4/17) as well as an information document on information submitted by Parties, including national reports (UNEP/MC/COP.4/INF/2). Observations from the Implementation and Compliance Committee on national reporting were included in the report on its work (UNEP/MC/COP.4/15/Rev.1). The Secretariat also encouraged finalization and submission of Minamata Initial Assessments (MIA) and National Action Plans (NAPs), as those would constitute valuable sources of information to be included in the reporting.

51. Ms. Bailey then turned to projects under the Specific International Programme. Twenty-four projects had been approved for funding under the first three rounds of applications; three projects had completed their technical activities while the other ones were under implementation. She highlighted projects that had been submitted to the third round of applications from twelve Parties, namely Bolivia, Botswana, Burkina Faso, Central African Republic, Chad, Guinea, Madagascar, Mongolia, Samoa, Surinam, Tanzania and Vietnam, which could not be approved for funding, but which partners may wish to consider for other forms of support. Finally, she drew attention to the Minamata Online information-sharing sessions held on various topics, noting recordings and presentations were available on the website of the Convention.

Item 6

Updates by the Secretariat of the GEF and Intergovernmental Organizations on their respective mercury-related activities

52. Mr. Anil Sookdeo (GEF Secretariat) provided a short summary of the overall GEF support to the Minamata Convention and a brief update on the ongoing GEF 8 replenishment. Since 2010, the GEF had programmed over \$380 million in projects in 117 countries to support work on mercury and the implementation of the Convention. In terms of geographical distribution, China had received close to 20% of resources for the implementation, similar to the programming for the Stockholm convention. Resources programmed reflected concentration on ASGM, the largest source of mercury use and emissions, and predominantly in African, in Latin America and to a lesser extent in Asia. In addition to ASGM and enabling activities, the GEF was also supporting work in sectors such as healthcare, dental amalgam, cosmetics, VCM, chlor-alkali, non-ferrous metals and primary mining. In addition to the PlanetGOLD programme, the GEF was supporting the GEF ISLANDS programme in 33 small island developing states to address the issues of mercury waste and mercury devices healthcare waste and products. Turning to the GEF 8 replenishment due to start in July 2022, he highlighted that work on ASGM would continue, with however more emphasis placed on other areas of the Convention including mercury in products to facilitate phase out, particularly of CFLs, dental amalgam and continued work on medical devices. Work on coal fired power plants would be informed by an ongoing GEF funded MSP to develop intervention models for this sector. Work in other areas such as cities and construction was also expected to produce mercury reductions from products and industrial sources.

53. Mr. Louis Marechal (OECD) provided an overview of ongoing and planned activities on mercury by the OECD, which had a particular focus on ASGM. He introduced the OECD Guidance for Responsible Supply chains of Minerals from Conflict-Affected and High-Risk Area which aimed to help companies identify and better manage risks throughout their entire mineral supply chains, including of gold, and to promote responsible investments in mineral resources production and trade. He presented the OECD implementation programme, rolled out with a number of partners, which focused on increasing transparency and integrity of the supply chain, through technical assistance, support to the development of international chain of custody/traceability systems and support to international initiatives such as PlanetGOLD. The programme also aimed at fighting illegal trade of mercury through enhanced international cooperation between law enforcement agencies. He subsequently mentioned ongoing work on the OECD Practical Handbook on Environmental Due Diligence in Mineral Supply Chains. Finally, he drew attention to the OECD Global Forum on Environment delicated to Mercury and to be held in November 2022 with the overall aim to encourage the exchange of information on common challenges in implementing the Minamata Convention and on possible solutions.

54. Ms. Halshka Graczyk (ILO) provided a brief update of ILO's mercury related activities. Regarding chemical safety, she noted ILO was working across different sectors and aspects relevant to mercury with a special focus on the safety and health of workers and their families, child labour and hazardous exposure in the ASGM sector, specialized guidance for economic sectors, as well as

initiatives towards just transition and promotion of green jobs. She mentioned ILO's global work related to mercury, such as a project on capacity development, legal frameworks creation, legal gap analysis and the development of occupational safety and health national profiles. She introduced the ILO list of occupational diseases and their diagnostic and exposure criteria which discusses exposure and diagnostic criteria for more than forty chemical agents including mercury and some of its compounds, before moving to the toxicological profile of mercury and details of the diagnostic criteria to guide stakeholders in the classification and reporting of diseases caused by the chemical and its compounds. With respect to priorities for future work, she indicated ILO would continue to address occupational safety and health which had been recognized as a fundamental principle and right in the working environment, develop capacity for medical service providers around the world, new technical guidelines on chemicals and a new international labor standard on chemicals that would certainly include mercury.

55. Mr. Kenneth Davis (UNEP) outlined the activities that UNEP was undertaking to support the Partnership and the implementation of the Minamata Convention. He indicated that ASGM was probably the biggest area of work at the moment, with UNEP assisting 31 countries in implementing their GEF funded NAP projects. Moving forward with ongoing efforts to ensure high quality of NAPs, he mentioned guidance materials, in particular the recent technical guide on ASGM tailings management, and the guidance document on incorporating gender dimensions into NAPs, as well as a new dashboard on the analysis of key data from the NAPs reports submitted to the Convention Secretariat. Mr. Davis mentioned the growth of the PlanetGOLD programme in its second phase with more potential projects under development. UNEP was also developing projects related to mercury phase-out in the chlor-alkali sector in Mexico, the further analysis and plan for emissions reduction potential from coal-fired power plants, mercury-added products including skin-lightening products, mercury containing medical devices and dental amalgam, supply and storage, including trade, as well as waste. UNEP continues to support the implementation of MIAs at country level, also maintaining the mercury inventory toolkit used in a large number of national mercury inventories. Data collected from the already available sixty-seven MIAs was analysed into a dashboard developed by BRI. Mr. Mitsugu Saito (UNEP) then introduced a multimedia training package currently being developed on mercury inventory and flow analysis, as well as on mercury monitoring, which included customizable presentations with pre-recorded lectures and user's manual.

56. Mr. Jerome Stucki (UNIDO) provided an update on UNIDO's activities. With the financial support of the GEF, UNIDO was assisting Parties to meet their obligations under the Minamata Convention, amongst others through Minamata Initial Assessments in 29 countries, and National Action Plans for the ASGM sector in 14 countries. Under the PlanetGOLD programme, UNIDO was also involved in capacity building related to strengthening of legislation, formalization, access to finance, as well as technology transfer at local and national levels. Mr. Stucki then highlighted two major projects on the use of mercury in industries: the first on the Vinyl Chloride Monomer (VCM) industry in China, which aimed at introducing mercury free technologies in the sector, also presenting an opportunity to reduce primary mining in China; the second on the Chlor Alkali industry in Mexico, which would be executed in collaboration with the Government of Mexico, with UNEP as implementing agency. Finally, UNIDO also benefitted from fundings from the European Union and Switzerland to implement projects on various sectors, including ASGM and mercury trade, under which several studies and publications were developed.

57. Mr. Oliver Wootton (UNITAR) highlighted UNITAR's continuous support to the Swiss funded ratification projects, aiming to accelerate the ratification and facilitate implementation of the Minamata Convention through consultations among stakeholders, assessment of existing legal instruments and identification of gaps, needs and steps towards ratification. At the moment, 20 out of the 24 countries that had benefited from this project have ratified the Convention, with new country projects in Georgia, Grenada, Haiti and Serbia. UNITAR was currently executing 2 GEF-funded MIAs in Nicaragua and Rwanda, as well as 3 NAPs in Angola, Nicaragua, and Rwanda, with UNIDO as the implementing agency. Mr. Wootton then highlighted available learning resources, including the Mercury Platform supported by UNEP and UNITAR, the MercuryLearn Training, the Chemicals and Waste Platform and a new e-Learning course on waste management and circular economy. Mr. Jakob Maag (UNITAR) introduced UNITAR's training materials on mercury mass flows assessments, which highlighted linkages between mercury inputs, releases, and emissions in the mercury lifecycle to support policy development. These training materials were developed for UNEP and delivered during a train-the-trainers workshop in 2022. The training materials were expected to be available by June 2022.

58. Mr. Laurent Granier (World Bank) started with the importance of pollution management, including mercury, in the World Bank dual mission of eradicating extreme poverty and building shared prosperity. He noted pollution was known to be the largest environmental cause of disease and premature death, as a consequence also representing an obstacle to economic growth, equality, and to addressing climate change concerns. Mr Granier provided an overview of projects implemented by the World Bank,

which included: (i) an Africa regional program on ASGM supported by the GEF in Ghana and Tanzania to understand and address mercury trade, use and waste; (ii) the development of diagnostics and decision-making tools aiming at providing guidance for health-impact analysis from land based pollution; (iii) a GEF-funded Amazon programme in Brazil, Colombia, Ecuador, Peru to develop diagnostics and tools to assess socio-economic costs of illegal gold mining and (iv) a number of technical assistance activities in the mining sector including in Madagascar, Tanzania, Armenia, Georgia and lending in Burkina Faso, Cameroon, CAR, Guinea, Mali, Niger, Nigeria, Sierra Leone, Togo to support governance and sustainable development of the mining sector. The World Bank was also involved in clean up actions and pollution prevention, notably past remediation of chlor-alkali legacy contaminated sites, and the development of strategies and action plans to address emissions and releases from non-ferrous metals smelting, as well as the provision of technical assistance and lending to promote clean energy that led to reduced emissions from coal combustion. The World Bank was finally fund raising to facilitate diagnostics and priority setting to support scaling up investments in LMICs.

59. Ms. Melissa Lim (Basel, Rotterdam and Stockholm Conventions Secretariat) shared an update of ongoing work relevant to mercury wastes under the Basel Convention, highlighting the linkages with the Minamata Convention, which directly refers to the Basel Convention technical guidelines in its Article 11. She recalled the three main pillars of Environmentally Sound Management (ESM), namely the control of transboundary movements of hazardous and other wastes, the promotion of environmentally sound management of wastes as well as waste prevention and minimization. Relevant activities included the work of the expert group established to achieve a common understanding of the concept of ESM and to produce guidance, tools and strategies to support the implementation of ESM. She noted the current update of various technical guidelines under the Basel Convention, highlighting particularly the ones on landfilling and incineration, and the review process of the Annexes I, III (hazardous characteristics), IV (disposal operations) to the Basel Convention which may impact the scope and implementation of the Convention. The technical guidelines for ESM of wastes consisting of, containing, or contaminated with mercury or mercury compounds were also being updated by the intersessional working group led by Japan to take into account the work under the Minamata Convention. The updated guidelines were expected to be presented at the Basel Convention COP15 in June 2022 in Geneva, Switzerland for adoption.

Item 7

Thematic break-out groups discussions on priorities areas for future work in the context of the Global Mercury Partnership

60. Ms Wiriwutikorm introduced the approach for the discussion on priority areas for future work and possible contribution from the Partnership, inviting participants to discuss in two break-out groups the issues of mercury trade and flows and of mercury and biodiversity, which both had been flagged through previous meetings of the PAG as well as by Partnership areas as issues where future work in the context of the Partnership could be beneficial and of potential relevance to several Partnership areas.

61. Both groups started with consideration of the issue of mercury trade and flows. Mr. Jerome Stucki (UNIDO) and Mr. Peter Maxson (Concorde East/West) were invited to say a few introductory words, to share some observations on the priorities that they saw as potentially useful for the Partnership to consider further. Amongst others, the issues of illicit trade, of enhancing transparency and traceability along the mercury life cycle of mercury, of trade in mercury compounds, of governmental control of stocks to gradually reduce mercury use, and of the reliability of trade data were noted. The discussions highlighted the importance of increasing knowledge and data on mercury flows and trade, including mercury added products, and to address some of the observed discrepancies with UN Comtrade data. In terms of potential future contributions from the Partnership, the development of a mercury flow analysis to better understand the gaps, challenges and identify the areas where further detailed and representative data would be valuable was also suggested as well as the organization of a webinar on these topics. Several participants also underscored the importance of adopting regional and global approaches to collect robust data on mercury flows and trade, also taking into account the fate of these flows as waste.

62. Moving forward on potential contributions for addressing the topic of mercury and biodiversity, Ms. Malgorzata Stylo (UNEP) and Mr. David Evers (BRI) gave insights into the nexus between environmental mercury and biological diversity, and the importance to further improve knowledge and understanding of mercury with regards to the threats and impacts it has on biodiversity. Amongst areas where further work might be undertaken, the discussions highlighted interest in (1) enhancing knowledge and understanding related to: impacts on biodiversity and ecosystems of mercury use in ASGM and existing restoration efforts, on ecotoxicology to better determine risks to biodiversity, including in particular with respect to the effects of mercury on wetlands and biota's reproductive

capacity; (ii) contributing regional data on mercury in the environment towards global mercury monitoring efforts. The organization of consultations with relevant stakeholders was also raised as a way to further discuss and collect existing information.

63. The discussion on priority areas also further highlighted the importance of further work under the Partnership on mercury from the sectors of oil and gas, including flaring, and of non-ferrous metals mining and smelting. Participants also noted the importance of the measurement of mercury emissions from both sectors. The issue of the storage and sound management of seized mercury, as well as the collection of further information on mercury from cement kilns were also raised. Follow up webinars on these different topics could be organized, bringing key stakeholders together.

Item 8

Updates on the 15th International Conference on Mercury as a Global Pollutant (Virtual, 24 to 29 July 2022)

64. Mr. Lynwill Martin (South African Weather Service), Chair of the fifteenth International Conference on Mercury as a Global Pollutant (ICMGP15), shared latest developments on the ongoing preparations for the Conference, to be held in a virtual setting from 24 to 29 July 2022, under the theme of “Reducing Mercury Emissions to Achieve a Greener World.”². The Conference would feature plenary talks on the following topics: “Global Change and Geochemical Mercury Cycling”, the “Correct use of Hg Guideline Values by Non-health Experts”, “Future of Mercury Research at a Glance” and “Industrial Emissions and Challenges”. It would be preceded by workshops on various topics including ASGM and HS codes during the week of 18 to 22 July 2022:

65. Mr. Martin also indicated that plenary sessions on mercury from ASGM in Africa and effectiveness evaluation under the Minamata Convention would be moved to ICMGP16, tentatively scheduled in 2024, in Cape-Town, South Africa.

Item 9

Other matters

66. Mr. Ankrah drew the attention of the PAG to its next annual meeting, possibly towards the end of 2022, to be further discussed in the coming months in light of the priorities and needs raised during the discussions.

Item 10

Closure of the meeting

67. In their closing remarks, the co-chairs expressed their gratitude to the audience for their time and valuable input, recognizing the Partnership as a platform encouraging a wide range of collaboration among various stakeholders. They paid particular tribute to all for their contributions during the discussions and praised their efforts to seek practical solutions for minimizing and preventing the effects of mercury on health and the environment. They finally invited participants to continue the work in the next few months and join future gatherings.

68. Ms. Sandra Averous (UNEP) thanked the co-chairs for their constant engagement and precious role throughout the PAG-12 meeting, as well as all attendees for their active participation. She concluded by mentioning the reporting of the PAG co-chairs to the upcoming COP-4.2, also looking forward to capitalizing on ideas provided and continuing the rich interactions notably through upcoming events. The meeting was closed at 3.00 p.m. CET on 14 March 2022.

² www.ilmexhibitions.com/mercury2022/