



**United Nations  
Environment  
Programme**

**UNEP Global Mercury Partnership  
Advisory Group  
Eleventh meeting**  
Virtual meeting, 15-16 December 2020

**Report of the eleventh meeting of the Global Mercury  
Partnership Advisory Group (15-16 December 2020)**

**Item 1**

**Opening of the meeting**

1. The eleventh meeting of the UNEP Global Mercury Partnership Advisory Group (PAG-11) was held virtually on 15 and 16 December 2020. The meeting was opened at 1:00 pm CET on 15 December 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 eleventh meeting and thanked observers for their attendance. 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 since their designation at PAG-10 and acknowledged the key role of Partnership area leads and partners whose commitment had not faltered despite the pandemic situation. She stressed the collective efforts still needed to address the global threat posed by mercury, and highlighted the critical role played by the Partnership to support to the implementation of the Minamata Convention, provide knowledge and science on mercury and deliver outreach and awareness raising towards global action. She drew attention to the Partnership’s more than 200 members, including 20 new partners since PAG-10. Over the past year, the Partnership’s engagement remained wavered, including through an array of awareness raising activities, cooperation with the Minamata Secretariat on intersessional work in preparation for the fourth meeting of the Conference of the Parties (COP4), the further development of a number of projects including on Artisanal and Small-scale Gold Mining (ASGM), chlor-alkali, emissions from coal combustion or mercury monitoring amongst others, and the consideration of cross cutting topics, mercury from oil and gas and from non-ferrous metals mining and smelting. Finally, she reaffirmed UNEP’s support to the Partnership and its mission to protecting human health and the environment from mercury, and noted it was an inspiring example of how voluntary networks constituted relevant pools of expertise in support of a Convention and platforms of cooperation between a wide range of stakeholders to help build and sustain momentum.
3. Ms. Monika Stankiewicz, Executive Secretary of the Minamata Convention, highlighted in her introductory statement the complementarity of the Convention and the Partnership, which showcased successful international governance arrangements. She paid particular tribute to the PAG co-chairs, to the leads and co-leads of individual Partnership areas as well as all partners. She highlighted the importance of collaboration between the COP and the Partnership, and the future work of the Partnership in supporting the implementation of the Minamata Convention. Recognizing the diversity of priorities and challenges faced at the national level, support was needed to meet the Convention’s

objectives and deadlines. Looking forward, she drew attention to COP4 and looked forward to the contributions of the Partnership in terms of technical input to the ongoing intersessional processes, capacity building and technical assistance, knowledge and science as well as on outreach and awareness-raising.

4. The co-chairs then welcomed participants to the meeting, including the leads and nominees of the different Partnership areas, as well as all observers. Ms. Wiriwutikorn thanked Ms. Gail MacDevette and Ms. Stankiewicz for their inspiring words, which reminded the PAG of the key role the Partnership has played since its very beginning as well as the important mission ahead to protect human health and the environment from the effects of mercury. She noted the objectives of the meeting, which in addition to taking stock of progress on a number of topics identified at PAG-10, was to discuss ways the Partnership could further evolve and meet its goal despite the current unprecedented crisis, also exploring future priorities. Mr. Ankrah then expressed the wish for constructive and productive discussion. He welcomed Ms. Celia Chen as new co-lead of the Mercury Air Transport and Fate Research area. Finally, Mr. Ankrah thanked the leads and co-leads for their dedication as well as the Government of Sweden for its financial contribution to the Partnership.

## Item 2

### Organizational matters

#### (a) Adoption of the agenda

5. The PAG adopted the agenda for its meeting on the basis of the provisional agenda set out in document UNEP/Hg/PAG.11/1.

#### (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.11/2.

## Item 3

### Update by the Secretariat of the Minamata Convention on preparations for the fourth meeting of the Conference of the Parties and intersessional work, technical assistance and capacity-building activities, “Minamata Online” sessions, as well as national reporting

7. Upon invitation by the co-chairs, Ms. Claudia ten Have (Secretariat of the Minamata Convention) provided an update on preparations for COP4, as well as on intersessional work, technical assistance and capacity-building activities, “Minamata Online” sessions<sup>1</sup>, as well as national reporting.

8. With regard to COP4, she indicated that all preparatory meetings, including of the COP Bureau, and of the Regions (scheduled in September 2021), would be held virtually, and more information on whether the COP would be held in person provided closer to the meeting dates, depending on the worldwide pandemic situation. Going through the intersessional work mandated by COP3, she noted the close cooperation with the Partnership on the issue of customs codes and ASGM tailings management as well as the strong involvement of a number of partners in technical expert groups, including on work related to Articles 4 and 5 (mercury-added products and manufacturing processes in which mercury or mercury compounds are used), Article 9 (releases), Article 11 (mercury waste) and Article 22 (effectiveness evaluation).

9. She then turned to introducing the “Minamata Online” sessions organized over the past months around three themes: implementation review and support, mercury science, and COP4 preparations. The Partnership contributed to some of these events and co-hosted a session on “Multimedia modelling of global mercury movement” co-organized by the Mercury Air Transport and Fate Research Partnership area<sup>2</sup>. A second season was under planning, for which input and collaboration with the Partnership would be sought, for instance on issues such as ASGM, mercury added products or evaluation of effectiveness.

10. She discussed the Specific International Programme, from which Parties can apply directly for grants. Further to the Programme’s operationalization at COP1, two rounds of applications had been completed, and 15 projects supported so far. A third round of applications had been launched on 15

<sup>1</sup> <http://www.mercuryconvention.org/Meetings/MinamataOnline/tabid/8527/language/en-US/Default.aspx>

<sup>2</sup> <http://www.mercuryconvention.org/News/fromtheConvention/MOMultimediamodels/tabid/8684/language/en-US/Default.aspx>

December 2020 until 18 March 2021. As in the case of the second round, the Partnership Secretariat will be invited to review project proposals submitted.

11. She noted that work had been carried out on the issues of mercury trade, emissions and mercury-added products with funding from the EU. In response to a decision at COP3, work was ongoing to develop a roadmap for the inclusion of gender aspects in the work of the Minamata Secretariat, expected to be finalized by February 2021, further to a call for input, Ms. ten Have invited attendees to share any relevant information that may contribute to this work.

12. With respect to reporting under the Convention as per Article 21, Ms. ten Have was pleased to indicate that the first biennial report had seen a reporting rate by Parties of 79%. All reports received were available on the Convention's website and would be reviewed by the Implementation and Compliance Committee in the lead up to COP4.

13. Finally, in response to a question from a member of the PAG on the overlapping between the meetings of the Conferences of the Parties to the Minamata Convention and to the UN Framework Convention on Climate Change in November 2021, Ms. ten Have indicated her hope that such coincidence could actually be an opportunity to provide a bigger context and overview of both Convention's work.

#### **Item 4**

#### **Updates by each Partnership area and by the Secretariat of the Global Mercury Partnership on key activities in follow up to the tenth meeting of the Partnership Advisory Group, outreach, communication and new partners**

14. Introducing the agenda item, Mr. Ankrah drew attention to document UNEP/Hg/PAG.11/3, which presented the report on activities undertaken within the Partnership, reflecting input received from Partnership areas on their activities during the period from October 2019 to November 2020. He invited area leads to provide a brief update on their respective activities and to share key highlights, future planned activities, priorities and needs identified in the context of their area of work as well as opportunities for resource mobilization.

#### **Mercury releases from coal combustion**

15. Ms. Lesley Sloss (IEA - Clean Coal Centre), co-lead for the area, gave a snapshot of recent awareness-raising activities, which included contribution to a "Minamata Online" session on Article 8 (emissions)<sup>3</sup>. She noted that the IEACCC had won a US State Department 2 million USD project to evaluate and reduce mercury emissions from the coal combustion sector in India and Indonesia. The first phase of the project, soon to be completed, had produced a detailed unit by unit mercury emission inventory for over 100 coal units in Indonesia, according to which only a small number of plants (15 to 20) was responsible for a large proportion of emissions, hence highlighting the relevance of targeted reductions. The results would be shared at a webinar in January 2021. The second phase of the project in Indonesia would aim at selecting 3 plants and propose specific strategies for mercury reduction over the coming 2 years.

16. Ms. Sloss also said the area would be contributing to International Conference on Mercury as a Global Pollutant (ICMGP15) and in particular to a plenary session on emissions of mercury from industrial activities, which represented an opportunity for the dissemination of the results of the study reports undertaken in the context of the Partnership on mercury from oil and gas and from non-ferrous metals.

17. The annual area meeting, which was to be held in September 2020 in Jakarta, Indonesia, along with the annual MEC15 (Mercury and multi-pollutant emissions from coal) workshop, would most likely be organised in a virtual setting early 2021.

18. Turning to main priorities of the area, she stressed the importance of providing guidance and knowledge to developing countries for controlling mercury emissions from the coal sector. Regarding funding, the continuous decrease of financing towards the coal sector also impacted funding capacities for cleaning out coal plants, which may lead to the unintended consequence of funds being sought from sources that could be less demanding in terms of emissions controls. Efforts were ongoing to seek opportunities for funding, in particular from the GEF, towards training and capacity building activities on emissions monitoring and pollution control in India.

<sup>3</sup> <http://www.mercuryconvention.org/News/fromtheConvention/MOArt8Emissions/tabid/8626/language/en-US/Default.aspx>

19. Finally, Ms. Sloss indicated the results of the Indonesia project could be presented at COP4, and include a training on how to produce a detailed emission inventory for the coal sector and use the data to develop a cost effective plan to implement the provisions on emissions under the Minamata Convention.

#### **Mercury air transport and fate research**

20. Mr. David Evers (Biodiversity Research Institute), co-lead of the area, started by welcoming Ms. Celia Chen (Dartmouth College) as new fellow co-lead further to her designation at the annual area meeting held on 10 December 2020<sup>4</sup>.

21. Mr. Evers presented the development of a global web-based knowledge platform for existing and new mercury data on biota, which involved the collection of data; the structuring of the platform, where activities of the area would be integrated and which was expected to start early 2021; and finally the availability of data on mercury and strengthening of data collection, which would take place beyond 2022. The objectives of the platform included the establishment of a science-policy Advisory Panel, the assessment of web-based global knowledge platforms, the generation and centralization of database on existing mercury concentrations in biota, the identification of a suite of queries from Parties and other stakeholders of the Minamata Convention (including the science-policy advisory panel), the enhanced collaboration with data providers and experts for designing a functional online platform and finally the conduct of testing of the platform, planned to be showcased at COP4 before finalizing the project.

22. Regarding outreach and communication, Ms. Celia Chen, co-lead of the area, underscored the area's willingness to expand its representativity in terms of geographic, sectoral as well as expertise coverage as well as to reach out to a broader audience. Efforts on communication would include the organization of online meetings, in person meetings prior to the COP, e-mail updates and newsletter, including input to the existing Partnership newsletter.

23. In addition, Mr. Nicola Pirrone (CNR), co-lead of the area, shared some of the key activities undertaken over the last year, which included support in the elaboration of a guidance document on mercury monitoring for COP4, assistance to countries and other relevant stakeholders in mercury assessment and monitoring capacities, exchanges with other programmes such as the Global Observation System for Mercury (GOS4M) as well as the promotion of research on mercury contamination in air and marine environments. The area had also contributed to a number of events, including "Minamata Online" sessions and in particular the one on "Multimedia modelling of global mercury movement"<sup>5</sup>.

24. Finally, Mr. Pirrone provided an overview of the GOS4M, which aimed to provide relevant tools, data and support to policy makers and stakeholders for an informed evaluation of cost-effective strategies to reduce the negative effects of mercury on human health and the environment, and which contributed not only to the Minamata Convention but also to the 2030 agenda for sustainable development. In terms of resource mobilization, several options were currently explored, including the development of a new 4-year project, the Global Mercury Observation Training Network, with funding from the European Commission. This project involved international researchers for studying various aspects of mercury's global biogeochemical cycle.

#### **Mercury releases from the cement industry**

25. Ms. Claude Lorea (Global Cement and Concrete Association - GCCA), lead of the area, clarified that the GCCA had now fully integrated the initiatives and projects of the previous area lead, the World Business Council for Sustainable Development Cement Sustainability Initiative, and was hence ready to kick-off the work of the area.

26. In terms of planned activities, she highlighted the intention to support the development of a database for emissions inventory. In light of the variations in mercury emissions worldwide, she said this work would help disseminate information on monitoring techniques; support evaluation of emissions and the effectiveness of emission reduction approaches; establish an accurate plant information database; and encourage the inclusion of cement manufacturing in country mercury inventories. Future work under the Partnership area would also relate to the development of outreach materials as well as collaboration with other programmes to disseminate information and promote available techniques for reducing and controlling mercury emissions from the cement industry, notably

<sup>4</sup> <https://web.unep.org/globalmercurypartnership/mercury-air-transport-and-fate-research-partnership-area-2020-meeting>

<sup>5</sup> <https://web.unep.org/globalmercurypartnership/minamata-online-multimedia-modelling-global-mercury-movement>

through workshops. Future work would also encompass support to the development of policies and regulatory frameworks and the facilitation of knowledge exchange on new and emerging technologies.

27. As for challenges, Ms. Lorea underlined the issue of data collection, noting that only around 40% of the world's emissions were currently covered in the existing data. Finally, she stressed the importance of identifying a co-lead for the Partnership area, of broadening its membership, and of cooperating with other relevant stakeholders, such as the Partnership area on Mercury Releases from Coal Combustion or the Bromine Association.

#### **Mercury cell chlor-alkali production**

28. Mr. Benjamin Vauter (United States of America) started with key highlights on projects approved, notably in Mexico, where the GEF had validated a project on the conversion of the two remaining chlor-alkali plants in the country (currently in the Project Preparation Grant – PPG - phase in collaboration with UNEP and local partners), in Brazil, where business associations had been facilitating the search for financing of membrane replacement and mercury waste treatment, as well as in the Arctic Region, with ACAP expert group on mercury and POPs seeking funding from the Arctic Council Project Support Instrument for a project dedicated to the reduction of mercury emissions and releases from chlor-alkali facilities that impact the region. Mr. Vauter also mentioned the ongoing collaboration with the Mercury Waste Management area to identify the needs and challenges encountered by chlor-alkali producers. The pandemic had impacted the above-mentioned projects which were facing some delays, despite certain progress.

29. Identified priorities and needs for the area included facilitating knowledge exchange between countries on the conversion of mercury-cell facilities; supporting countries still in need in the identification of financing options for the management of remaining stocks; providing technical assistance where required for the management and conversion of mercury cell facilities and drawing on the technical expertise of members to allow additional services to countries.

30. Looking forward, Mr. Vauter indicated future activities would include additional data collection from countries implementing conversion projects, providing technology guidance, supporting fund raising initiatives as well as focusing on stocks management and disposal for converted plants and enhancing cross-partnership collaboration. He also highlighted opportunities for resource mobilization from the Green Climate Fund, within the context of its 2020-2023 strategy, for financing non-mercury methods that were more energy efficient than mercury-cell.

#### **Mercury supply and storage**

31. Ms. Ana García (Spain) emphasized the importance of eliminating the production and export of mercury, identifying the amount of mercury made available from relevant sources but also collecting and disseminating information on available methods for storage and/or final disposal of the excess of mercury from various sources.

32. In terms of key highlights of the Partnership area, she mentioned the analysis of available information on mercury trade, which showed the existing related uncertainties. She underlined the difficulties in gathering data from mercury suppliers and supply chain related to ASGM as well as the importance of undertaking the studies on mercury from the oil and gas and mining sectors and gathering further information on mercury from these potential sources of emissions, releases but also supply.

33. She indicated the Partnership area was involved in two projects in Colombia, on the “Reduction of the use of mercury in communities dedicated to Artisanal and Small-scale Gold Mining in Colombia” 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 the Spanish Ministry of Science and Innovation. The area had also participated in a number of meetings, including the fifty third Safety, Health and Environment Congress, the Third Technical Seminar of the Prevention and Management of Contaminated Sites Latin American Network (ReLASC) as well as in events and meetings organized by other Partnership areas.

34. Future planned activities included collaborations 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 disposal. The 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 for each step of the mercury life cycle, including to

address potential illegal sources of mercury supply. The area would be meeting at the beginning of 2021 to discuss these issues.

35. Finally, she underscored the need to enhance collaboration with the private sector, address existing difficulties in collecting data but also strengthen capacities and exchange in the Latin American region for an effective management of mercury. She mentioned difficulties in terms of resource mobilization, but noted initiatives such as the organisation of workshops, and the elaboration of questionnaires and surveys to increase funding opportunities.

### **Mercury waste management**

36. Ms. Yuri Kato (Japan), lead of the Partnership area, indicated the area held the first segment of its 2020 meeting online on 27 November 2020<sup>6</sup>. The objectives of the meeting were to review ongoing activities and consider future ones; identify technologies and services on mercury waste management provided by Partners as well as challenges on mercury waste management faced by countries in order to promote matchmaking; and develop the activity plan.

37. As for future planned activities, the Partnership area intended to circulate a survey to all partners on the needs and challenges in the management of mercury waste as well as the type of support that could be provided by the area in response to those. The findings of the survey would inform discussions on future activities that may be undertaken in the context of the area and will be presented at its next meeting, scheduled to be held during the first trimester of 2021.

38. Regarding priorities and needs, proposals by partners included the enhancement of capacity building, through events for instance on the Basel Convention technical guidelines on mercury waste, the development of guidance on the management of certain specific mercury waste, including in the form of factsheets which could complement the Basel guidelines, the exploration of options to share best practices and experience on mercury management techniques as well as the collaboration with other Partnership areas and finally the organization of capacity building and trainings, for instance on the storage of waste from mercury containing medical devices, as well as in cooperation with the Secretariat of the Minamata Convention.

39. Finally, she reminded participants about the Catalogue of Technologies and Services on Mercury Waste Management, developed to disseminate information on mercury waste management technologies, products and services of partners. The Catalogue was being updated and would be made available on the Partnership website<sup>7</sup>.

### **Artisanal and small-scale gold mining (ASGM)**

40. Ms. Susan Keane (Natural Resource Defense Council), co-lead of the area, started by stressing the severe impact COVID-19 had on the ASGM sector, including on income further to lockdowns, supply chain issues affected by travel restrictions as well as dramatic decrease in certain local gold prices, amongst others. Despite these challenges, partners had pursued their work, remotely but also where possible directly with communities in the field. Amongst the numerous activities carried out by partners, work had been done on enabling the environment for a smooth transition to mercury-free practices, including access to finance mechanisms for appropriate technology, as well as creating responsible supply chains and due diligence rules. Ms. Keane also indicated that work had been done on mercury trade related to ASGM as well as on remediation.

41. She further reminded the PAG that 2020 was the first full year of the planetGOLD project and indicated the GEF would be expanding the programme to another 8 countries to support the reduction of mercury in the ASGM sector through holistic approaches (access to finance, awareness-raising among others). National Action Plans (NAPs) were also taking place in countries around the world, with some expected to be finalized and submitted to the Minamata Secretariat in 2021.

42. Turning to future activities, Mr. Ludovic Bernaudat (UNEP), co-lead of the area, noted that partners were eagerly looking forward to a restart field activities. In terms of planned work, the Partnership area would continue working on the inclusion of tailings management in the ASGM NAP guidance document, as per the request of COP3. The ASGM Global Forum was expected to be organized by planetGOLD in Indonesia in late 2021. Finally, the area would continue its support to preparations for ICMGP in 2022. As for priorities and needs, Mr. Bernaudat highlighted the need to re-establish formal value chains for gold exports, to assist miners in improving their recovery to

<sup>6</sup> <https://web.unep.org/globalmercurypartnership/mercury-waste-management-partnership-area-2020-meeting>

<sup>7</sup> <https://web.unep.org/globalmercurypartnership/catalogue-technologies-and-services-mercury-waste-management-2020-version>

alleviate some of the reduced income due to the pandemic as well as to strengthen the work on mercury trade.

43. Mr. Bernaudat concluded on resource mobilization, noting the possible third phase of planetGOLD, which could be expanding to additional countries as well as the second Conservation X Lab challenge on how to improve the mining sector and its impact to the environment, which was an interesting new source of financing.

### **Mercury in products**

44. In terms of key highlights, Mr. Thomas Groeneveld (United States of America), coordinator of the area, mentioned the work undertaken in follow up to COP3 in collaboration with the Minamata Convention Secretariat, as well as relevant experts, in developing a report on the Harmonized Commodity Description and Coding System. He also reminded the launch of a series of webinars, with the organisation in late 2020, in cooperation with WHO and the Zero Mercury Working Group, of two information sharing sessions, dedicated to mercury containing medical devices and mercury containing cosmetics. These events focused on information sharing, guidance and exchange of experience, challenges and best practices to support Parties in phasing out mercury-added products.

45. Mr. Groeneveld then listed potential future activities, which included the development of a survey on challenges in implementing the provisions of Article 4 of the Minamata Convention, organizing additional webinars, possibly on mercury-containing lamps and dental amalgam, conducting a market study on the availability, effectiveness and affordability of LED lighting as well as pursuing work on proposing a phase-out planning and outreach in Africa and the Caribbean.

46. Finally, priorities for the upcoming year lied in finalizing the HS codes report in preparation for COP4, assisting the organization of product-specific events as well as ongoing gathering and sharing of information on challenges and lessons learned in the implementation of Article 4 of the Convention.

47. Ms. Elena Lymberidi-Settimo (Zero Mercury Working Group), presented their work in support to the phase-out of mercury-added products. In particular, she mentioned the conduct of market studies on LED, and the implementation of mercury-added products phase out projects in Kenya, Ivory Coast, India, Bangladesh and the Philippines. Despite the COVID-19 situation, progress had been recorded, with studies on alternatives, outreach, including to customs officials, guidance on procurement of alternatives and support to the development of draft roadmaps for phase out. 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 should be available for COP4.

### **Secretariat of the Global Mercury Partnership**

48. In her update, Ms. Stephanie Laruelle (UNEP) noted that 21 partners, representing international organization, governments as well as the scientific community, NGOs and the private sector had joined the Partnership since the previous PAG meeting, bringing to over 200 the total number of partners to date<sup>8</sup>. She indicated that the revised version of the Overarching Framework document, developed in follow up to PAG-10 decision, was now available in the 6 official UN languages on the UNEP website and made available to the meeting in document UNEP/ Hg/PAG.11/6.

49. Further to the PAG-10 call for the organization of webinars to facilitate information sharing, the Secretariat had launched a survey in April 2020 to identify interests and priority topics. Topics for which respondents expressed largest interest included, amongst others, the environmentally sound management of waste from mercury-added products, the phase out of mercury-added products, mercury trade, the management of ASGM tailings, as well as the reduction of mercury emissions and releases from cement production and coal combustion. The Partnership subsequently initiated a series of information-sharing webinars and contributed to a number of Minamata Online sessions<sup>9</sup>. In follow up to PAG-10, the Partnership had also launched a newsletter, available for all Partnership areas and their members to share information on their work, raise awareness, feature highlights, events, resources, new partners etc. Finally, Ms. Laruelle said work had been undertaken in follow up to PAG-10 on the issues of mercury from oil and gas and from non-ferrous metals mining and smelting (see item 5).

<sup>8</sup> The list of partners may be found at : <https://web.unep.org/globalmercurypartnership/partners>

<sup>9</sup> Information on past and upcoming events may be found at: <https://web.unep.org/globalmercurypartnership/events>

## Item 5

### **Progress and next steps in relation to the work on cross-cutting topics initiated in follow up to the tenth meeting of the Partnership Advisory Group (mercury from oil and gas and mercury from non-ferrous metals mining and smelting)**

50. Introducing the agenda item, Mr. Ankrah reminded participants that at its tenth meeting, the PAG had requested the Secretariat to convene targeted discussions with interested partners and stakeholders on the issues of mercury from oil and gas and from non-ferrous metals mining and smelting, which it had identified as cross-cutting. In response to this request, expert consultations had been launched in April 2020 through online meetings, with the overall objective to identify potential useful contributions from the Partnership, within the context of its mission and its existing areas of work. Interested Partnership area leads subsequently agreed to guide a process for developing study reports on these two topics.

51. Draft annotated outlines of these reports were presented in documents UNEP/ Hg/PAG.11/4 and UNEP/ Hg/PAG.11/5 for consideration and further discussion at PAG-11. Together with the information collected, the finalized annotated outlines, to be revised in follow up to PAG-11, would be used as a basis to develop the first draft of the study reports, for which further expert consultations (including possibly through online meeting) were expected during the first quarter of 2021, before the finalization of the reports.

#### **(a) Mercury from oil and gas**

52. Upon invitation by Ms. Wiriwutikorn, the lead author of the report on mercury from oil and gas, Ms. Lilian Corra (International Society of Doctors for the Environment – ISDE), presented the proposed approach laid out in the draft annotated outline (UNEP/ Hg/PAG.11/4). She thanked the co-chairs, the co-leads as well as all partners and stakeholders who had contributed knowledge and expertise to this work, indicating that comments received, if not already included, would be addressed directly in the first draft of the report and that their authors may be contacted for further details where needed. Regarding references, a bibliography would be attached to the report.

53. 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 sectors were treated and accounted for, and may be entering the market for other uses. Turning to the envisaged content of the report, she noted it would cover the following aspects: the problem of mercury in oil and natural gas, mercury content in oil and gas deposits, mass of mercury in crude oil and in natural gas, techniques used to remove mercury from crude oil and natural gas and finally the fate or possible fate in the environment of mercury generated from oil and gas activities. The report would also suggest initial ideas for further research and cooperation. Noting that estimates of mercury in both crude oil and natural gas varied depending on the methodology used for calculating regional averages, she indicated the report would include observations based on the sources of information as well as discrepancies identified.

54. She invited additional contributions from partners and relevant stakeholders with expertise in the sector in order to complement the information available. In particular, she encouraged the submission of case studies, in addition to the one of the “Campana refinery in Argentina” mentioned in the annotated outline. Information gaps had been encountered in particular with regard to mercury waste, including sludges generated by the processing of oil and natural gas but also on the mercury containing waste removed, both in terms of locations and quantities. She also called for further information on the management, treatment and disposal of such waste, in particular with respect to best practices, the location of existing facilities as well as the available capacities.

55. Participants subsequently discussed how one may reduce data uncertainties, in light of the limited information readily accessible in the public domain as well as the complexity of the sector; the availability of estimates of mercury releases to air from residential natural gas uses, for which some information would be included in the final report; as well as the possible inclusion of mercury in the marine environment from the offshore oil industry. Mr. Eisaku Toda (Secretariat of the Minamata Convention), noted that this ongoing work on mercury from oil and gas was relevant to the intersessional work conducted on mercury releases in preparation for COP4.

#### **(b) Mercury from non-ferrous metals mining and smelting**

56. Upon invitation by Mr. Ankrah, the lead author of the study report on mercury from non-ferrous metals mining and smelting, Mr. Peter Nelson (Macquarie University), provided an overview of the annotated outline (UNEP/ Hg/PAG.11/5). He started by recalling the objective of the work, which as per the guidance received by the Partnership area leads, aimed to provide a better



understanding globally of the mercury mass balance between supply, storage, and waste treatment related to non-ferrous metals mining and smelting operations.

57. In outlining the envisaged content of the report, he noted that it currently entailed seven main sections focusing on: existing activities related to mercury in the non-ferrous sector; the lifecycle of mercury in non-ferrous metals mining and smelting; mercury emissions and releases estimates from the non-ferrous sector (looking at existing knowledge and knowledge gaps) using existing tools, such as the UNEP Mercury Inventory Toolkit or the Global Mercury Assessments guidelines; control of mercury emissions and releases, discussing BAT/BEP guidance and cases studies, as well as smelter/roasting waste management; identified needs for further research and cooperation; existing relevant work and guidance on best practices and finally case studies, which would be included in the final report.

58. Mr. Nelson expressed his sincere gratitude to the co-chairs, the leads as well as the partners and stakeholders who had contributed to the work so far. He indicated that comments received related to the availability of information on the non-ferrous metals mining and smelting, reference to national and regional regulations, the inclusion of information shared by the sector at recent Minamata Online sessions as well as the current intersessional work on releases undertaken in the context of the Minamata Convention in follow up to COP3. It had also been recommended to select specific topics for which Parties had expressed needs for further research as well include in the report recent work undertaken in China on the sector.

59. In the ensuing discussion, the need for information on quantities of mercury recovered from mining and smelting processes as well as from waste management was highlighted, noting that these may constitute sources of mercury supply. Mr. Nelson confirmed such data would be included in the report, although recent trends suggested less opportunity to recover mercury than in the past. It was further suggested that mercury flows and regional activities could be covered, including from the Andean region, where facilities had previously traded surplus mercury, as well as from Argentina. One participant sought information on the availability of robust mercury emissions data for industrial gold production. It was noted that it may be of relevance to explore opportunities for information exchange with the ongoing work on mercury from oil and gas. Responding to a request regarding the possibility to study mercury information globally in a comparable way, Mr. Nelson underscored that collecting data that was representative and having harmonized analysis and sampling procedures was important but not the prime focus of this report.

60. Mr. Toda indicated that this ongoing work on mercury from non-ferrous metals mining and smelting was also of relevance to the intersessional work on mercury releases, the latest outcome of which would be taken into consideration in the report. He noted that as part of an EU funded project, the Minamata Secretariat was looking at conducting regional/global activities, possibly training, with a focus on the non-ferrous metals sector, and for which collaboration with the Partnership would be welcome. Information on quantities of mercury by-product as a source of supply would be of interest to the ongoing work on the Convention's effectiveness evaluation.

61. In his concluding remarks, Mr. Ankrah invited participants to follow up with the Secretariat of the Partnership with any questions, comment or available information that may be of relevance to the preparation of the reports.

## **Item 6**

### **Discussion on future priority actions towards the Partnership's objectives and associated resource mobilisation**

62. Introducing the agenda item, Mr. Ankrah invited PAG members to consider priorities as they related to the Partnership's focus of work, namely on supporting timely and effective implementation of the Minamata Convention; on providing state of the art knowledge and science on mercury and on delivering outreach and awareness raising towards global action on mercury.

63. He highlighted some of the topics for future work identified earlier in the meeting as well as at PAG-10 which included, in addition to mercury from non-ferrous mining and smelting as well as from oil and gas: the further refinement of default factors from key sectors, in particular with respect to the cement production and coal fired power plant; the establishment of a framework for a centralized repository on mercury assessments; the development of guidance to address mercury-added products and of tools to make information on waste technologies accessible; and the organization of webinars to facilitate information sharing. In addition, he mentioned areas previously discussed for possible collaboration amongst Partnership areas, such as the management of ASGM tailings; support to countries on the issue of mercury seizure; the assessment of the impact of ASGM emissions and releases on local, regional and global environment; mercury monitoring (for air, biota and humans),

noting the Partnership provided a forum and platform for exchange of information and collaboration on a range of issues.

64. In the ensuing discussion, the need for further work on mercury trade, which was of relevance to several Partnership area, was stressed. The issue was also strongly related to the issue of mercury supply sources, which needed to be better identified as those may lead to mercury subsequently placed on the market and potentially diverted for use in the ASGM sector. As a first step in moving further, it was suggested that the Partnership undertakes a mapping and compilation of existing studies and projects on the issues of mercury trade and flows and identifies on that basis where the gaps were and where the Partnership may have a useful contribution.

65. Finally, Ms. Sandra Averous (UNEP) communicated the results of the poll conducted during the meeting to allow participants share their views on priorities of work for the Partnership. Additional proposals included the further improvement of emission factors (including guidance on sectoral inventory production and action plans); geospatial analysis and mapping of ASGM activity and land cover impacts; the description and testing of mercury free technologies for ASGM communities measuring gold yield, investment cost; mercury impact on biodiversity and ecosystems as well as monitoring of mercury in water.

## Item 7

### Updates by the Secretariat of the GEF and intergovernmental organizations on their respective mercury-related activities

66. Upon invitation by Ms. Wiriwutikorn, Mr. Anil Sookdeo (GEF Secretariat) presented an update of GEF activities in supporting the Minamata Convention, including an overview of projects funded since GEF5, when support started through enabling activities. About 80 percent of the funding was destined to projects aiming at implementing the Convention, mostly full-size projects (i.e. above 2 million dollars). Under GEF6 and GEF7 were also funded 4 programmes (approximately 45 million dollars each), the PlanetGOLD programme, an African programme on ASGM in Tanzania and Ghana, as well as under GEF7 the extension of the GEF Gold+ programme to additional countries as well as the ISLANDS programme focusing on products and waste in small-island developing states. The most important areas funded were ASGM (50 %) and enabling activities with 117 Minamata Initial Assessments (MIAs) and 42 NAPs funded (19 %), however the share of the latter was expected to go down in GEF8 in light of the number of countries covered. The GEF had started to work in all major sectors except non-ferrous metals (apart from a small medium sized project in China on zinc still to be received). The GEF had also received a project proposal to start looking at how one may address emissions from the coal power sector and was expecting to receive a project proposal on cement. In terms of geographical distribution, African countries (29 %), Asia (26 %) and Latin America and the Caribbean (25 %) had benefitted most of GEF funding. Regarding agency distribution, UNEP had the most diverse portfolio with work on 7 out of 10 different areas funded, followed by UNDP and UNIDO. The GEF was also working with Conservation International, involved in the Guyana project of PlanetGOLD and as lead agency of the GEF Gold+ programme, and with the West African Development Bank notably on waste issues, including mercury waste.

67. Ms. Halshka Graczyk (ILO) indicated ILO, which had long recognized mercury as an occupational hazard, was involved in several sectors and aspects relevant to mercury, amongst which for instance ASGM. She introduced the ILO list of occupational diseases, which identified and recognized current occupational diseases worldwide, amongst which diseases caused by mercury or its compounds, with the aim of helping countries elaborate their national lists. Diagnostic criteria notes were currently being developed to provide for coherent diagnosis. With respect to priorities for future work, she noted the ILO global review on workers exposure, the diagnostic criteria notes for occupational diseases related to mercury, gender aspects in the mining sector, the expansion to various occupational sectors to ensure the full extent of exposure was recognized, and finally enhancing multi-sectoral collaboration.

68. Mr. Kasper Koefoed (UNDP) provided an overview of UNDP's mercury-related activities, all of which were funded by the GEF. Activities supported included a number of MIAs and NAPs, as well as projects focusing on medical devices and products, currently in Argentina, Colombia, Ecuador, Egypt, Honduras, Jordan and Uruguay as well as in the African region through a health care waste management project in Ghana, Madagascar, Tanzania and Zambia that was also dealing with medical devices. Projects were currently under development on medical devices and products in China (also addressing the issue of manufacturing), Panama, Peru, Rwanda and Vietnam. UNDP was also working on the ASGM sector, under the PlanetGOLD programme in Colombia, Ecuador, Indonesia, Kenya and Peru and the Gold+ programme under development in Honduras, Suriname and Ghana.

69. Mr. Kenneth Davis (UNEP) outlined recent and future planned work by UNEP in supporting the Partnership as well as in addressing the mercury issue more broadly. He indicated the development of guidance documents and tools to help countries elaborate their NAPs, as well as the evaluation/peer review of national NAPs in the context of PlanetGOLD. Featuring ongoing efforts, he mentioned in particular the ASGM tailing management guide developed in collaboration with the Partnership and the Minamata Secretariat for submission at COP4, as well as a Guide to incorporate gender dimension into NAPs, noting the latter could be good areas of collaboration with ILO. Mr. Davis also mentioned UNEP was contributing to the PlanetGOLD programme on knowledge management aspects, as well as on the implementation of several country projects. 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 in cooperation with WHO, supply and storage, including trade, as well as waste. UNEP was also maintaining the mercury inventory toolkit used in a large number of MIAs.

70. In his presentation Mr. Jerome Stucki (UNIDO) indicated UNIDO had supported a number of enabling activities, with currently four active MIAs in Afghanistan, Nicaragua, Rwanda and Sudan and nine active ASGM NAPs, amongst which four newly approved ones for Afghanistan, Bolivia, Cameroon and Nicaragua. ASGM NAPs had been completed in 2020 for Burkina Faso, Ecuador, Ghana and Nigeria. He also highlighted the work conducted by UNIDO on ASGM in the context of the planetGOLD programme, natural resources management in Colombia as well as concepts approved withing GOLD+ programme for Bolivia, Ghana with UNDP, Madagascar and Nigeria.

71. Mr. Oliver Wootton (UNITAR) provided an overview of UNITAR's activities related to mercury and the Minamata Convention. With respect to the execution of enabling activities funded by the GEF, UNITAR had supported the completion of MIAs and NAPs for Eritrea, Sierra Leone and the Democratic Republic of Congo with UNEP, as well as MIAs for Bangladesh, Guinea-Bissau, Mauritania, Mozambique and Samoa with UNDP. UNITAR was also supporting an ongoing MIA in Sudan with UNIDO, a NAP project in Angola and hopefully future projects in Rwanda and Nicaragua would be launched in the coming months (both with UNIDO). Finally, UNITAR was also involved in ratification projects funded by the Swiss Government.

## Item 8

### **Overview of preparations for the 15th International Conference on Mercury as a Global Pollutant (Cape Town, 24 to 29 July 2022) and discussion on possible areas of collaboration and contribution**

72. Mr. Lynwill Martin (South African Weather Service), Chair of the fifteenth International Conference on Mercury as a Global Pollutant (ICMGP15), offered an overview of ongoing preparations for the Conference, scheduled to take place in Cape Town, South Africa, from 24 to 29 July 2022, further to a decision to postpone the Conference by one year in light of the uncertainties regarding COVID-19. He noted that the Conference would bring together experts from around the world under the general theme "From Minamata to Africa and beyond: addressing mercury challenges in global environment change", enabling them to exchange information and research.

73. He introduced the schedule for the week, which would include plenary, oral and poster sessions, workshops, and social events. Plenary sessions would cover various aspects, and focus on mercury research in the Southern hemisphere, science policy within the Minamata Convention, ASGM, new and emerging research, mercury from oil and gas and from non-ferrous metals, as well as health. He also presented the calendar for the submission of abstracts for which a call would be launched on 1st August until 15 November 2021. Information on the Conference will be made available at <https://www.ilmexhibitions.com/mercury2022>.

74. Noting the number of opportunities for cooperation and collaboration between the Partnership and the ICMGP, these would be further explored in the coming months. The participation of a number of Partnership area leads and partners in the Conference, including in its Scientific Steering Committee as well as in the coordination of plenary sessions, was recognized as particularly fortunate to enhance such collaboration.

## Item 9

### **Other matters**

75. Mr. Ankrah drew the attention of the PAG to its next annual meeting, noting that COP4 represented a good opportunity for a back to back meeting, to be further discussed in the coming months in light of the evolution of the pandemic situation.

## **Item 10**

### **Closure of the meeting**

76. In their closing remarks, the co-chairs thanked all attendees of the PAG for their engagement and productive spirit in the meeting, representatives of the GEF and of intergovernmental organizations, the ICMGP chair for their contribution as well as the Secretariat for its support. They paid particular tribute to Ms. Corra and Mr. Nelson for their important work on the topics of mercury from oil and gas and from non-ferrous metals mining and smelting, encouraging participants to further contribute knowledge and information to their report and looking forward to the next steps.

77. Ms. Gail MacDevette congratulated all participants for a very productive meeting, noting the strong engagement and continuous efforts by partners to “making mercury history” despite the current situation. She thanked the co-chairs for their constant engagement, Partnership area leads and partners for their active participation as well as all presenters for their valuable contributions to the meeting. She was thrilled to see such a large and high-level attendance, showing the enthusiasm around the activities of the Partnership. She concluded by inviting the Partnership to contribute with its steppingstone to the transformational and busy year ahead for the chemicals and waste community. The meeting was closed at 3.30 p.m. CET on 16 December 2020.