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UNEP Global Mercury Partnership
Advisory Group
Thirteenth meeting
9 and 10 November 2022, Paris (France) and online

Report of the thirteenth meeting of the Global Mercury Partnership Advisory Group (9 and 10 November 2022)

Item 1

Opening of the meeting

1. The thirteenth meeting of the UNEP Global Mercury Partnership Advisory Group (PAG 13) took place on 9 and 10 November 2022 in Paris (France) at the OECD headquarters and online[1], back-to-back with the OECD Global Forum on the Environment dedicated to mercury[2].

2. The meeting was opened on 9 November 2022 at 10:00 a.m. CET by Sandra Averous-Monnery (UNEP) on behalf of the Secretariat of the Partnership. In her opening remarks, Ms. Averous welcomed members of the PAG and acknowledged efforts of partners all around the world to make mercury history. She reminded the key catalysing role of the Partnership in enhancing global action and highlighted recent advancements. She noted PAG meetings offered a unique opportunity to exchange updates on successes and ongoing initiatives, including on cross-cutting work such as the recent study reports developed in the context of the Partnership on mercury from non-ferrous metals mining and smelting and mercury from oil and gas (see page 3). Ms. Averous then invited the PAG to exchange on key future priorities and activities. She concluded by thanking the co-chairs for their energy and leadership, co-leads, as well as all partners for their dedication and commitment. She finally congratulated OECD for a successful Global Forum and expressed UNEP's gratitude for generously hosting the PAG.

3. After warmly welcoming all co-leads, nominees, observers to the PAG, Teeraporn Wiriwutikorn (Thailand), co-chair of the PAG, acknowledged the participation of the Minamata Convention Secretariat, noting with appreciation the close cooperation with the Partnership, and thanked OECD for welcoming the PAG. She presented the objectives of PAG-13 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, building on the discussions a few months back at PAG-12[4]. 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, all partners as well as the lead authors of the two study reports presented for consideration at this meeting. She

[1] www.unep.org/globalmercurypartnership/events/unep-event/partnership-advisory-group-meeting-13

[2] www.oecd.org/chemicalsafety/globalforumonenvironmentworkingtowardstheeliminationofmercuryandreducingitsharmfulimpactsonhumanhealthandtheenvironment.htm

[3] www.unep.org/globalmercurypartnership/resources

[4] https://www.unep.org/globalmercurypartnership/events/unep-event/partnership-advisory-group-meeting-12

concluded by wishing all a good-spirited and open discussion, to ensure actionable and practical next steps are agreed upon. Finally, she warmly welcomed the participation of Monika Stankiewicz, Executive Secretary of the Minamata Convention, highlighting the focus of the Partnership towards meaningful and sustainable implementation of the Convention.

4. Monika Stankiewicz started by highlighted the unique role of the Partnership in bringing together around key mercury issues a wide range of stakeholders, including Parties to the Convention. She expressed her wish to continue collaboration with the Partnership to advance mutual objectives, and reflect on ways to further its work. Moving forward, she highligted the importance of collaboration called for at the fouth meeting of the Conference of the Parties (COP4), which through decision 12/4 on international cooperation and coordination, recognized the role of the Partnership in bringing information and data on mercury, in supporting the Convention through the wealth of its expertise, e.g. in the elaboration of guidance, or in sharing information and best practices in repsonse to Parties evolving needs. She thanked the co-chairs, co-leads, as well as the Secretariat of the Partnership for their dedication. She highlighted her letter recently sent to the co-chairs, which outlined a number of areas for possible focused cooperation and encouraged an open exchange of views on these. She also indicated her wish to further discuss how the recently published study reports on mercury from non-ferrous metals and oil and gas could be brought to the attention of relevant stakeholders.

Item 2

Organisational matters

(a) Selection of Partnership Advisory Group chair/ co-chairs

5. Ms. Wiriwutikorn informed the Partnership Advisory Group that she unfortunately was not in a position to undertake a second term of office as co-chair, as a result of new responsibilities in her country. She expressed her sincere gratitude to the group, her fellow co-chair, Rodges Ankrah (United States of America) and the secretariat for their support. Rodges Ankrah started by expressing his sincere appreciation to Ms. Wiriwutikorn for her leadership role. He then invited expressions of interest from the group, also sharing his willingness to continue as co-chair, should the PAG so decide. As a result of the discussion, Mr. Ankrah was selected as chair for a second term.

(b) Adoption of the agenda

6. Following presentation by Stephanie Laruelle (UNEP), the PAG adopted the agenda for its meeting on the basis of the provisional agenda set out in document UNEP/Hg/PAG.13/1.

(c) Organization of work

7. 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.13/2.

Item 3

Update from the Global Mercury Partnership Secretariat on key activities in follow up to the twelfth meeting of the Partnership Advisory Group

8. Imelda Dossou Etui (UNEP) shared insights on activities and key highlights. She noted that since PAG-12, 4 organizations had joined the Partnership, bringing to over 240 the total number of partners to date[5]. She then provided an overview of recent Partnership Areas annual meetings as well as online information sharing sessions [6], including on “Minamata Initial Assessments: latest trends, key findings and data analysis tools”, on “Best practices to reduce mercury emissions from the cement industry”, as well as the side event in the margins of the Basel, Rotterdam and Stockholm Conventions COPs on latest developments, tools and practices for the environmentally sound management of mercury wastes. The Partnership and its area of work on mercury waste management also contributed to the Minamata Online session on “Technical guidelines on mercury waste management”.

9. Ms. Dossou Etui also mentioned envisaged upcoming events for which further details will be communicated as they become available, and recalled existing communication tools, including the newsletter released on a quarterly basis and the new website on which Partnership areas webpages, business plans and factsheets are currently being updated.

[5] The list of partners may be found at: www.unep.org/globalmercurypartnership/partners

[6] Information on events may be found at: www.unep.org/globalmercurypartnership/events

Item 4

Overview from Partnership Areas on key highlights and future work planned

10. Introducing the agenda item, Ms. Wiriwutikorn invited leads of Partnership areas to share key highlights of their activities and potential future work based on their reporting compiled in document UNEP/Hg/PAG.13/3.

Mercury releases from coal combustion

11. Lesley Sloss (International Centre for Sustainable Carbon), co-lead of the Partnership Area, shared an update of the recent work undertaken. The capacity building project in Indonesia and India, under a US Department of State grant, has been moving forward to reduce emissions, including mercury, from coal utilities. Four regional training workshops have been delivered on accurate and reliable emissions monitoring. An initiative has also been launched to establish benchmarking and best practices in emissions monitoring in India. In follow up to these, several countries from other regions expressed interest in similar trainings. Ms. Sloss announced that four more trainings would be delivered in 2023 on emissions control and invited expressions of interest in contributing to these, notably with practices and technologies that could be pertinent for the national circumstances. With regards to Indonesia, the grant allowed to facilitate the ranking of the entire coal fleet (over one hundred) on a unit-by-unit basis according to the emission rates of mercury and the predicted emissions over the remaining lifetime of the plant. Through this ranking and due to their interesting profile in terms of options for mercury control, three plants have been selected for further investigation, with first site visits planned for January 2023.

12. On behalf of her fellow co-lead, Peter Nelson (Macquarie University), Ms. Sloss then provided an overview of the GEF project initiated in October 2021 on the "Assessment of existing and future emissions reduction from the coal sector toward the implementation of the Minamata and Stockholm Conventions", and which consists of: (i) a comprehensive coal sectoral analysis, which will review scientific data on mercury, persistent organic pollutants and greenhouse gas emissions 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 to the Stockholm and Minamata conventions. She highlighted the main outputs currently in the development of estimates of emissions from coal-fired power plants, the development of emissions reduction scenarios, as well as the proposal of selection criteria for future projects and policy guidance for Parties to the conventions on decision-making processes towards emission controls in the sector.

13. As for planned activities, in addition to the announced regional workshops in India, the co-lead expressed the wish to organize an online meeting of the Partnership Area in January 2023, and an in-person event, tentatively in Jakarta towards mid-2023.

Mercury releases from the cement industry

14. Zaigham Abbas (Ministry of Climate Change, Pakistan), co-lead of the Partnership Area, presented major achievements and future work, which included the convening of an information-sharing session on "Best practices to reduce and control mercury emissions from the cement industry", and the revision of the Area's business plan.

15. In terms of planned activities, in order to continue supporting the cement industry monitor and mitigate mercury emissions, additional technical sessions were envisaged on mercury inventories, covering facility level aspects, but also on best practices and dissemination of available guidance such as the best available techniques and best environmental practices for reducing mercury emissions under the Minamata Convention and the Global Cement and Concrete Association (GCCA) Sustainability Guidance for reducing and controlling emissions of mercury compounds in the cement industry. Mr. Abbas concluded with insights on identified priorities for future actions drawn towards capacity building, raising awareness, monitoring, improving estimates, establishing an online library, and exploring opportunities for synergistic efforts in addressing mercury as well as other pollutants.

Mercury waste management

16. Misuzu Asari (Kyoto University, Japan), co-lead of the Partnership Area, started with an overview of key highlights, as follows: (i) the organisation of the Waste Management Area meeting, in September 2022 in Singapore and online to share updates on ongoing activities and exchange on future

work; (ii) the session on "Turning a mercury policy into practice" organized back to back with the Area meeting at the ISWA World Congress in Singapore; (iii) as well as ongoing activities under the working groups on resource development, capacity-building and awareness-raising, and solution exchange.

17. The first working group, on resource development, has worked on the update of the "Catalogue of Technologies and Services on Mercury Waste Management", and has initiated the development of factsheets on the environmentally sound management of mercury wastes. In this context, both the road map, factsheet template and list of mercury wastes streams to be prioritized have been finalized, and the group has agreed to develop a first factsheet on non-electronic measuring devices. The second working group, focusing on capacity-building and awareness-raising, has organised webinars and contributed to various events organized since PAG-12. The third working group shared a draft framework and leaflet for the "Solution Exchange" platform that it aims at piloting.

18. In terms of future planned activities, the Partnership Area envisions the development of factsheets for other priority mercury waste streams, the organization of a joint webinar with the Mercury Cell Chlor-Alkali Partnership Area, as well as the implementation of the pilot phase of the "Solution Exchange" platform.

Mercury air transport and fate research

19. Nicola Pirrone (CNR), co-lead of the Partnership Area, shared highlights on ongoing work. These included the participation in the workshop on "Data Management for Air Monitoring and Analysis" held in October 2022, activities on mercury exposure and impacts under the Research Infrastructure for Environmental Exposure Assessment in Europe (EIRENE RI) coordination, as well as the development of inventories of mercury emissions.

20. The Partnership Area was also involved in both the elaboration of the ICMGP synthesis paper related to the Integration of Research and Policy expected to be published in 2023, as well as contributions to various aspects of interest to the Minamata Convention related to public health, the Southern hemisphere and ASGM activities. Furthermore, The Biodiversity Research Institute (BRI) participated in the review of Minamata Initial Assessments and national mercury inventories along with the development of a dashboard on inventory data collected, in collaboration with UNEP. More recently, BRI has initiated a special issue in the journal Ecotoxicology aiming at "Assessing environmental mercury loads in biota and impacts on biodiversity to meet the needs of the Minamata Convention".

21. David Evers (BRI), co-lead, also mentioned the medium-size GEF project on mercury in skin-lightening products, co-executed by BRI and WHO through UNEP as an implementing agency with the technical support of the Partnership and its relevant areas of work, which would be of relevance for both the Partnership areas on Mercury in products and Mercury air transport and fate research. BRI is also involved in two projects funded by the Specific International Programme under the Minamata Convention, in Antigua and Barbuda, with the aim to create a regional mercury monitoring network in the Caribbean, and in Gabon, with the aim to develop a mercury monitoring network in Central Africa. Partners are invited to contribute as relevant with their experience and expertise.

22. In terms of planned and ongoing activities, such as the knowledge hub under the GOS4M, the technological development and the global mercury observation system will be continued. The maintenance and addition of new inventories data to the MIA dashboard is also envisaged. Further investigation and work will also be undertaken in the context of the special issue for the journal Ecotoxicology, with an objective of reaching around twenty to twenty-five papers focusing on mercury in biota around the world and impacts on biodiversity, and which are planned to be available electronically by COP-5 in October-November 2023.

Artisanal and small-scale gold mining (ASGM)

23. Jerome Stucki (UNIDO), co-lead of the Partnership Area, provided an overview of main activities of partners, classified in four main areas of intervention, namely policy, capacity building, awareness-raising and advocacy, and finally cross-cutting matters. At the policy level, activities focusing on the impact of ASGM on the environment (sampling of fishes and evaluation of mercury concentration downstream of rivers) were undertaken in Brazil. Similarly, in Papua New Guinea and Guyana, policy strengthening and capacity building activities on the ASGM sector were conducted to support national strategies for responsible mining. In Honduras and Peru, capacity-building respectively intends to address the management of contaminated sites and tailings, as well as responds to the demand on demonstration and trainings on mercury-free technology. With regards to awareness-raising and advocacy, Mr. Stucki pointed out to the Declaration of Responsibility and Sustainability Principles on responsible and sustainable gold mining in the Large-Scale Mining sector, elaborated by the London Bullion Market Association (LBMA) and signed by the Artisanal Gold Council (AGC), member of the Partnership Area.

24. Looking at planned activities and priorities for 2023, Mr. Stucki mentioned the continuous objective of strengthening the science-based work that will support policy making, the formalization of the ASGM sector, and capacity-building, notably with regards to responsible practices and supply chains, mercury-free technology demonstration and trainings, access to financing and tailings management and remediation in relation to the above-mentioned declaration. Furthermore, helping miners to access financing through the PlanetGOLD Programme will remain key, along with awareness-raising and advocacy, such as through the PlanetGOLD Global Forum envisaged for the second semester of 2023, possibly in Ecuador.

25. Mr. Stucky informed the group that he would importunely have to step down from his role as co-lead of the Partnership Area due to new assignments within his organization. He hence concluded his intervention by congratulating the co-chairs for their leadership as well as his fellow co-leads and all the partners for their commitment. On behalf of the group, Ms. Wiriwutikorn warmly thanked Mr. Stucky for his significant contribution to the work of the Partnership Area over the years, wishing him all the best in his new capacity.

Mercury cell chlor-alkali production

26. Benjamin Vauter (United States of America), Partnership Area co-lead, first noted the GEF CEO endorsement of the project to eliminate and manage mercury use from the Chlor-Alkali sector in Mexico. The five years project aims at eliminating, safely managing and disposing of about 130 tonnes of mercury from the Mexican chlor-alkali sector. Additionally, two facilities would respectively be decommissioned (along with the cleaning and disposal of the mercury) and converted into non-mercury technology.

27. Mr. Vauter then welcomed a new partner, TAUW, and thanked them for representing the Partnership Area at a recent workshop organized by UNITAR in Serbia to supporting the ratification of the Minamata Convention. Guido van de Coterlet from TAUW shared some insights about their work, indicating that as an engineering firm, TAUW was keen on sharing their knowledge with the Partnership on the deconstruction and remediation of chlor-alkali facilities, as well as supporting the identification and development of robust inventories of remaining facilities worldwide.

28. Mr. Vauter concluded with an overview of planned activities and priorities for 2023, which included: (i) the finalization of the Partnership Area business plan, considering the demographics as well around concerned sites and environmental justice/equity perspective; (ii) the implementation of the GEF project in Mexico which is expected to be launched in April 2023; (iii) the organization of a joint webinar with the Waste Management Area on the elimination of mercury and mercury waste management in the chlor-alkali sector, and finally (iv) further reflection on the development of a value creation project for abandoned mercury cell site in collaboration with the TAUW Foundation.

Mercury in products

29. Thomas Groeneveld (United States of America), co-lead of the Partnership area, Elena Lymberidi-Settimo (European Environmental Bureau and Zero Mercury Working Group) and. Rachel Kamande (Clean Lighting Coalition) shared the floor for the overview of the Partnership Area's work.

30. Ms. Lymberidi-Settimo started the update with the progress made under the UNEP project funded by the European Union on capacity-building in the Africa, Caribbean and Pacific regions. Three recent Memorandums of Understanding (MOU) were signed with Trinidad and Tobago, Antigua and Barbuda and St. Kitts and Nevis (SKN) for the phase-out of mercury-added products; followed by studies on mercury-free alternatives. Additionally, mercury-free procurement policies were being developed on measuring devices, dental amalgam and lamps. With regards to African countries, Kenya and Nigeria were benefitting from the support of NGOs for the implementation and enforcement of mercury-added provisions related to cosmetics, also as a contribution to the Skin-Lightening Cream Campaign. Work was also progressing under the SIP project in Nigeria, especially on mercury-containing products.

31. Under the Skin-Lightening Cream Campaign, a third sampling round was completed in early 2022. Communication wise, the report produced was advertised on CNN to highlight the continuous presence of potentially high mercury skin-lightening products available for sell on online platforms, and a side event on skin-lightening products was organized in the margins of the COP-4 in March 2022. An online database was also developed to compile results from the over one thousand products tested by various NGOs, including BRI, and government agencies.

32. With regards to the work on lamps,. Ms. Kamande highlighted projects conducted in Nigeria, Philippines, and Brazil to demonstrate the possibility to transition large entities to mercury-free lighting within a short period of time. A market global assessment was also conducted in over 35 countries, evidencing the cost-effectiveness and energy-efficiency of mercury-free LEDs.

33. Mr. Groeneveld concluded with priorities for future work, including an upcoming webinar on the production and use of mercury for dental amalgam, the updating of the U.S. mercury inventory, to continue supporting efforts related to the HS codes initiatives, as well as the organisation of the Partnership Area meeting during the second quarter of 2023. The identification and promotion of viable available cost-effective alternatives to mercury-added products along with the compilation of available resources on those products and alternatives also remained priorities for the year 2023.

Mercury supply and storage

34. Ana García (Spain), co-lead of the Partnership Area, shared an update on key activities and future work, noting first collaboration on the recently published study report on "Mercury from Oil and Gas", together with the International Society of Doctors for the Environment (ISDE) recognizing the importance of the sector, along with the non-ferrous metals mining. In terms of events, the Partnership Area was involved in the BRS COPs Side event on "Mercury Wastes: latest developments, tools and practices for their environmentally sound management", which also discussed wastes resulting from the non-ferrous, and oil and gas sectors.

35. Besides the holding of the Partnership Area meeting envisaged for the beginning of 2023, future planned activities included the increase of knowledge sharing, technical capacity and best practices on mercury from the oil and gas sector, the organization of webinars on mercury supply and storage, and collaborations with the industry on the environmentally sound management and storage of mercury in chlor-alkali. The Area also intended to join forces with the Partnership Area on Mercury Waste Management for the sound disposal of mercury wastes resulting from the oil and gas, and non-ferrous metals mining sectors, in parallel to the development of guidance on the safe storage and disposal of seized mercury. Finally, Ms. Garcia expressed the need to mobilise further resources, and promote transparency and traceability throughout the life cycle of mercury, which would consider supply sources, trade and export in order to address potential illegal sources of mercury supply.

Item 5

Update and perspective from the Secretariat of the Minamata Convention in relation to ongoing and future work of the Global Mercury Partnership

36. Marianne Bailey (Secretariat of the Minamata Convention) began with a snapshot of actions marking the fifth year of the Minamata Convention. She then shared some of the key highlights from the fourth Conference of the Parties (COP-4), held over two segments in November 2021 online and in March 2022 in Bali. In particular, under decision MC-4/12, COP-4 recalled the importance of the Partnership to further engage and support the effective implementation of the Convention. Moreover, it took note of the studies on "Interlinkages between the chemicals and waste MEAs and biodiversity" and on "Chemicals wastes and climate change: interlinkages and potential for coordinated action", and requested the Minamata Convention Secretariat to: (i) continue gathering knowledge about, raising awareness of and demonstrating, through appropriate means, the contribution of the implementation of the Minamata Convention to other relevant international regulations and policies, including those related to pollution, biodiversity and climate change; and (ii) prepare, subject to the availability of resources, a report, including possible recommendations, on how the Convention could contribute to the post-2020 global biodiversity framework, once adopted, for consideration by the Conference of the Parties at its fifth meeting;

37. Ms. Bailey then introduced a letter sent by Ms. Stankiewicz to the co-chairs of the Global Mercury Partnership, which outlined possible areas of collaboration between the Partnership and the Secretariat of the Convention, amongst others on:

(i) Intersessional mandates, which include decision MC-4/5 on the elaboration of the guidance document on BAT/BEP to control releases from relevant sources of mercury; decision MC-4/6 on mercury waste thresholds; decision MC-4/7 regarding the second review of the financial mechanism; decision MC-4/10 on the Gender Action Plan; and decision MC 4/11 on the effectiveness evaluation, including the open-ended scientific group for the effectiveness evaluation and the report on mercury trade, supply and demand.

(ii) The Convention's Technical Documents: dissemination, support use and/or review of the updated ASGM NAP guidance and technical document on tailings management, the knowledge management products such as the NAP and MIA dashboards, the work on customs codes for mercury-added products, the BAT/BEP guidance on mercury emissions, and the monitoring guidance for ASGM impacted areas.

(iii) Technical and capacity-building activities, considering the needs expressed by Parties, including in their national reports, and through information sharing on mercury science, linkages to climate change and biodiversity, and pertinent existing technologies and private sector initiatives.

38. On cooperation on technical capacity-building activities, Ms. Bailey recalled the work under the SIP, the GEF, which considerably increased its support to the Convention under GEF-8, as well as the special trust fund through which work on products, trade, and emissions funded by the European Union, as well as activities funded by Switzerland on waste management involving notably the Partnership Area on Mercury Waste Management has been undertaken.

39. She noted the third edition of the Minamata Online webinars were launched in September 2022 to continue to keep partners engaged and enhance access to information. Online sessions were proposed within three streams, namely COP-5 preparation, implementation, review and support, as well as mercury science, in collaboration amongst others with ICMGP and the Partnership.

40. In the ensuing discussions, the importance of the areas for collaboration put forward by the Secretariat of the Convention was highlighted. Regarding possible needs under the projects funded by the SIP that Partnership Areas may contribute to address, Ms. Bailey recalled that the Partnership contributed through its Secretariat to the review appraisal of SIP projects applications, but also proposed to explore how to facilitate relevant connections to enable parties to benefit from technical assistance and targeted mentoring from the Partnership Areas. Amongst others, it was suggested putting in place small financial schemes to involve mentors with specific technical capacities to support projects. The sectors of chlor-alkali and cement were put forward as sectors where contribution from the Partnership to capacity-building projects could be encouraged.

41. One participant also highlighted linkages between the study report on mercury from oil and gas and climate change and drew attention of the group to the GEF small grants, which could support addressing mercury related issues.

Item 6

Update on the OECD Global Forum on Environment: “Working towards the elimination of mercury and reducing its harmful impacts on human health and the environment”

42. Sylvie Poret (OECD) started by providing an overview of the work of OECD in relation to chemicals, noting that the organization strives to : (i) assist countries in their efforts to protect human health and the environment through improving chemical safety and biosafety; (ii) make chemical control policies more transparent and efficient and save resources for government and industry; and (iii) prevent unnecessary distortions in the trade of chemicals, chemical products and products of modern biotechnology. To do so, the OECD has put in place its Environment, Health and Safety (EHS) Programme for the development of standards, guidelines, best practices and tools for chemicals’ management, as well as enhancing capacity building and cooperation.

43. Ms. Poret then turned to presenting an overview of the Global Forum on Environment (7 and 8 November 2022) [7], highlighting the following key messages from the discussions:

(i) the availability of effective and economically accessible non-mercury substitutes;

(ii) the importance of improving inter-agencies and countries’ cooperation;

(iii) the need to improve availability and quality of data on trade, to support the identification of priority actions for reducing mercury use in products and manufacturing;

(iv) the enhancement of public procurement policies as a good lever towards mercury-free products;

(v) the importance of awareness-raising and advocacy from the civil society on risks, lack of legal framework and inadequate controls;

(vi) the promotion of “non-mercury-based” ASGM sustainable models, and access to finance for miners; and

(vii) the importance of sound management of mercury-containing waste.

44. In terms of potential future work, the secretariat of the Global Forum will report to the Environmental Policy Committee (EPOC) in October 2023 for further actions to contribute to the

[7] https://www.oecd.org/environment/gfenv.htm

reduction of mercury pollution, including the development of specific tools, noting the need not to duplicate existing work.

45. Participants unanimously recognized the great benefits of holding the PAG and Global Environment Forum back-to-back, noting the high relevance and usefulness of continuous and enhanced collaboration between the OECD and the Partnership on a number of topics. Among others, the subsequent discussions reflected on: the role of the OECD on policy processes with regards to mercury and the Minamata Convention ; the work of OECD on chemical control policies, existing non-mercury-based products; and the collaboration with non-OECD countries (projects, existing funds for countries and NGOs to complement the work undertaken under the Partnership etc.).

46. Berrak Eryasa (OECD) then mentioned the development of a BAT/BEP report on mercury releases and the contribution of OECD to the work under the Minamata Convention on the development of guidance regarding releases of mercury. She also mentioned the latest report of the OECD on best available techniques, which focused on cross country analysis of several BAT-Reference Documents (BREFs) for 3 sectors: thermal power plants, cement production and textile industries, with an attention to mercury emissions within the production schemes of these sectors. The OECD is also envisaging another cross-country work in three other sectors, namely iron and steel, paper and pulp production, and waste incineration, including an analysis of their mercury emissions to air.

Item 7

Discussions on future work in the context of the Global Mercury Partnership on: (a) Trade and flow; (b) Technical and scientific capacity enhancement; (c) Management of mercury stocks; (d) Biodiversity, climate change and mercury; (e) Disposal of mercury added products at the national level; and (f) Other

47. The co-chairs introduced the envisaged cross-cutting topics for future work in the context of the Partnership, namely: (a) trade and flow, (b) technical and scientific capacity enhancement, (c) management of mercury stocks, (d) biodiversity, climate change and mercury; (e) disposal of mercury added products at the national level; and (f) other topics raised by the audience.

48. Members of the PAG subsequently exchanged and shared ideas both in plenary and breakout groups. Key outcomes included the following suggested next steps:

(i) **Trade and flows**: an online session to exchange latest information on trade and other relevant related topics, including online sales and trade in mercury compounds organized by the Partnership would be a useful first step to quick start action.

(ii) **Technical and scientific capacity enhancement:** the accessibility of existing information and tools could be further strengthened through the Partnership website, for example through thematic knowledge hubs. Partnership areas are encouraged to continue sharing relevant information that could be made available through the Partnership website, newsletter, or e-mailing campaigns. The Partnership was also invited to explore the feasibility to develop user friendly tools and training materials (videos or other effective visuals), if possible, in relevant languages, on selected matter such as technical challenges, seizing the opportunity of experience of partners, as well as supporting and sharing training sessions organized by countries.

(iii) **Management of mercury stocks and disposal of mercury added products at national level:** Further work across Partnership areas was encouraged, noting for instance the factsheets currently being developed under the Waste Management Area would also touch upon storage aspects. Suggested activities also included a mapping of existing technologies and storage facilities, the development of a background note on specific key challenges, the dissemination of best practices, guidelines and experience on interim safe storage and transport, as well as the support to countries for the sound management of seized mercury.

(iv) **Biodiversity, climate change and mercury:** As discussions focused mainly on biodiversity, it was suggested to further explore in the context of the Partnership the relationships with climate change, especially in the current context of the triple planetary crisis of climate change, biodiversity loss and pollution. PAG members confirmed support to the Global Literature Review on ASGM and Biodiversity, as well as the work of the Partnership Area on mercury air transport and fate research in gathering and publishing relevant information and data on the topic. Recommendations were also formulated towards the exploration of linkages between other mercury related sectors and biodiversity. In light of ongoing discussions in the context of the Convention on Biological Diversity, a

consultation may be organised to ensure that mercury and its impacts on biodiversity receive the deserved attention.

49. Finally, Ms. Averous underscored the importance of updating each Partnership Area's business plans and summary factsheets that are shorter versions of the business plans, for which the Secretariat of the Partnership is available to support.

Item 8

Next steps to the study reports on: (a) Mercury from non-ferrous metals mining and smelting; (b) Mercury from oil and gas

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

50. Mr. Ankrah recalled the overall objective of the report, which is 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 then invited the lead author of the report, Peter Nelson (Macquarie University), to remind the group of key findings and areas identified for future work, including in the context of the Partnership.

51. Mr. Nelson reminded the PAG that the report consisted of a critical review of existing knowledge and information gaps on mercury from non-ferrous metals mining and smelting activities, with an emphasis on copper, lead, zinc and large-scale gold, featuring existing methods currently 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.

52. In terms of key findings, Mr. Nelson highlighted that the non-ferrous sector was estimated to be a large source of emissions and releases to the environment. It is the third largest source of emissions to air, with about 10 to 15% of total emissions (noting however industry estimates are significantly lower and this difference requires resolution) and 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 are envisaged to be much larger, although they include secure impoundments such as controlled tailings piles or engineered landfills however they are subject to important uncertainties. The sector, which is expected to grow considerably through the next thirty years, represents also a large source of supply, accounting for around 15% of total mercury supply. Mr. Nelson also reminded the audience of the ongoing development of guidance on mercury releases under the Minamata Convention.

53. Moving forward on knowledge gaps, Mr. Nelson raised the following key areas for further investigation: mercury content in ores and concentrates, at plant and country level; mercury air emissions test data; mercury concentrations in rejected materials such as tailings; mercury distributions 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 deports to emissions and releases to air, land, water, waste and by-products. Identified needs related 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, including mercury removal systems, off-gas cleaning systems in smelters, risks mitigation measures, as well as options for environmentally sound interim storage and disposal of mercury.

54. In the ensuing discussion, a number of (additional) aspects were flagged by PAG members for possible future support in the context of the Partnership, namely to:

(i) Help identify active mines concerned with mercury contaminated wastes (such as in Latin America), with an encouragement to countries to share information on mercury contaminated waste, in particular mining countries;

(ii) Support the sound management of tailings under projects aiming at recovering gold from mercury contaminated tailings;

(iii) Help advance on issues where the financial mechanism of the Minamata Convention is not in a position to provide direct funding, i.e., with respect to concerns not directly related to obligations under the Convention;

(iv) Further explore the differences in estimates of emissions, e.g., between the UNEP Global Mercury Assessment and data collected from the private sector, encouraging private stakeholders to provide additional quality and reliable data;

(v) Improve the quantification of mercury emissions from metals with increasing demand and mining (i.e., aluminium, manganese) as well as the reconsideration of the non-ferrous mining sector and its contribution to mercury emissions in the coming years, notably due to the expected important growth in the sector;

(vi) Further investigate the amount of mercury produced in this sector and its accessibility on the market.

55. Several ongoing work which could contribute to further refine information on mercury from the sector were highlighted, amongst which the UNEP Mercury inventory Toolkit Level 3, which would be fully mass balanced and expected to be published early 2023 and of particular relevance to the zinc sector; as well as existing and/or upcoming GEF funded projects on non-ferrous metals mining and smelting.

56. Finally, the conduct of follow up dialogue with interested stakeholders from the sector was raised as a way to further explore possible collaboration through the Partnership. Such group could also consider developing a business plan, although the sector was currently not covered under a dedicated Partnership Area.

(b) Mercury from oil and gas

57. Ms. Wiriwutikorn recalled the overall objective of the report, which is to better understand how mercury can be released, in addition to how waste is treated and accounted for and how it may enter the market for other uses. She then invited Lilian Corra (International Society of Doctors for the Environment – ISDE), lead author of the study report on mercury from oil and gas, to remind the audience of key findings and areas identified for future work, including in the context of the Partnership.

58. Ms. Corra highlighted amongst others the following key findings and recommendations: the need for additional understanding of and work on mercury removal systems; the reduction in mercury emissions and releases from processing; and the development of relevant steps and planning for maintenance and inspection to limit emissions and releases of mercury accumulated in separators and heat exchangers. In terms of future work to be undertaken, she noted the following would contribute to better understand and assess mercury emissions and releases: (i) the monitoring of the entire process, from production to refined products; (ii) appropriate mercury mass balances of oil and gas processes; (iii) information exchange on mercury determination and sampling methods; (iv) facilitated access to information on the production and fate of mercury waste and mercury-containing waste flow.

59. In order to support the implementation of measures to reduce or eliminate mercury emissions and releases, Ms. Corra pointed in particular to the identification, monitoring and assessment of mercury waste and mercury-containing waste volumes generated by the sector, including further understanding of their fate and the dissemination of guidelines to support the implementation of Best Available Technologies and Best Environmental Practices (BAT/BEP). She also highlighted the need to improve the capacities of concerned facilities to process mercury and mercury-containing waste and safely dispose it of, along with the strengthening of human and technical capacities, and enhanced collaboration to facilitate the identification and evaluation of mercury emissions and releases from oil and gas all along its value chain were also among suggested future actions.

60. In the ensuing discussion, participants highlighted the need to further exchange information on mercury emissions and releases as well as waste from the sector, amongst others from sources such as the reference report of the UNEP Mercury Inventory Toolkit, as well as existing knowledge from the industry and experts. Getting a better understanding of the application of existing practices and technologies available as well as their location was also noted as areas of work that could be beneficial.

61. The importance of awareness-raising and dissemination of best practices was also highlighted with suggestions for the development of basic guidelines, building amongst others on tools such as the EU BAT/BEP guidance document as well as knowledge from the sector. Targeted awareness-raising and outreach could also be undertaken in the context of the Partnership to disseminate best practices.

62. One participant welcomed the recent release of the report but noted it failed to reflect some of the comments received, in particular regarding occupational exposure and industries' efforts to use personal protective equipment as well as monitoring techniques to assess the levels of mercury.

Overall conclusion

63. In his closing remarks for this agenda item, Mr. Ankrah noted as next steps the need to further disseminate both reports, raise awareness and exchange with relevant stakeholders, including with both sectors and further explore the relevance of dedicated Partnership areas.

Item 9

Other matters

64. Mr. Ankrah invited participants to discuss the date of the next PAG meeting. Noting that as per the Overarching Framework of the Partnership, the PAG is to meet at least on an annual basis, the co-chair suggested that the PAG convenes its next meeting in conjunction with the fifth meeting of the Conference of the Parties to the Minamata Convention, scheduled to be held in Geneva, from 30 October to 3 November 2023.

65. Mitsugu Saito (UNEP) announced that under the Japan funded project "Promoting the Minamata Convention by making the most of Japan's knowledge and experiences" in Asia Pacific, the UNEP Regional Office for Asia Pacific, in close collaboration with the National Institute for Minamata Disease, are calling "for Expressions of Interest for the second round of Laboratory Proficiency Testing for Mercury". Further information was available on the Partnership website[8].

Item 10

Closure of the meeting

66. In his closing remarks, Mr. Ankrah invited the co-leads to further discuss the ideas exchanged at the PAG within their respective areas of work, but also encouraged them to share any additional suggestions that would be relevant for the Partnership. He also insisted on the updating of the business plans which would give an overview not only of the priorities but also of the relevant actions to achieve the expected objectives.

67. Mr. Ankrah expressed his appreciation of the very rich dialogue of the two-days meeting, from ideas for further collaboration provided by the Secretariat of the Minamata Convention, to the cross-cutting study reports and specific work that could be done under the Partnership, recalling the main challenge of moving from a dialogue and individual actions to designing the Partnership as a tool for addressing specific mercury concerns. He reminded that the Partnership remains a place where to focus on implementation across different bodies and through concrete actions despite the limited resources. On that point, he also stressed the need of further exploring options for additional resources to supplement the ongoing work.

68. He then thanked the OECD for hosting the PAG-13 meeting, the leads, co-leads and nominees for their time and contribution to the Partnership and the meeting, as well as the Secretariat of the Partnership for organizing the meeting. He finally thanked Ms. Wiriwutikorn for her leadership over the past years and her wisdom over the years.

69. The meeting was closed at 3:00 p.m CET.

[8] www.unep.org/globalmercurypartnership/news/blogpost/call-expression-interest-second-round-laboratory-proficiency-testing