

1- Identification
1.1 Project details

GEF ID	10748	SMA IPMR ID	127612
Project Short Title	Coal Emissions	Grant ID	S1-32GFL-000689
		Umoja WBS	SB-018237 / SB-016064.01.03
Project Title	Assessment of existing and future emissions reduction from the coal sector toward the implementation of the Minamata and Stockholm Conventions		
Project Type	Medium Sized Project (MSP)	Duration months	Planned 36
Parent Programme if child project			Age 23,8 months
GEF Focal Area(s)	Chemicals and Waste	Completion Date	Planned -original PCA 30-Sep-24
Project Scope	Global		Revised - Current PCA N/A
Region		Date of CEO Endorsement/Approval	20-Apr-21
Countries	China, India, Indonesia, Thailand, Vietnam, Malaysia, Philippines, South Africa	UNEP Project Approval Date (on Decision Sheet)	6-May-21
GEF financing amount	USD 594 000	PCA entering into force	30-Sep-21
Co-financing amount	USD 640 000	Start of Implementation (Date of 1st Disbursement)*	28-Oct-21
		Date of Inception Workshop, if available	9-Mar-22
Total disbursement as of 30 June	USD 337 830	Midterm undertaken?	No
Total expenditure as of 30 June	USD 303,313	Actual Mid-term Date, if taken	/
		Expected Mid-Term Date, if not taken**	Not required
		Expected Terminal Evaluation Date	30-Sep-25
		Expected Financial Closure Date	30-Mar-26

* As per Legal Agreement signed with the EA, project effectiveness is defined as "the date of receipt of first disbursement or sub-allotment".

1.2 EA: Project description

The **objective** of the project is to demonstrate mercury and POPs emissions reduction potential from coal fired power plants and industrial boilers in order to support governments in implementation control and reduction strategies for new and existing sources. The project will quantify potential future emissions of mercury and POPs for both the current baseline scenario and for a range of development scenarios. This data will underline the benefits that will accrue from targeted international action embedded in the Paris Agreement targets and the Stockholm and Minamata Conventions. At the global level, this project will strengthen information exchange among stakeholders, using the Global Mercury Partnership and the existing industrial emissions platforms within the Partnership. A key output of the the project is the identification of opportunities for regional/global cooperation and synergies between countries working on these issues.

The project will be implemented through the following components:

Component 1: Comprehensive coal sector analysis, drawing on the best available information to assess the contribution of the coal sector to mercury and POPs emissions for future scenarios, and relate that to commitments that have been made under the Paris Agreement to reduce CO2 emissions. As such, the outcome of this component will be improved data availability on the potential for mercury and POPs reduction which facilitates the development of appropriate national legislation and regulatory capacity in future projects.

Component 2: Strategy for the coal sector's emissions reduction contribution to Stockholm and Minamata Conventions, utilising the findings of Component 1 and translating these into a selection criteria under Component 2. This selection criteria will be used to determine priority countries for future interventions in the coal sector. Information generated from the project will also be used by key decision makers in respective countries to guide their national strategies for implementation of the Minamata and Stockholm Conventions, as well as potentially, the Paris Agreement.

Component : Monitoring and Evaluation - Project implementation will be monitored and evaluated on an ongoing basis to ensure continued relevance and impact.

Executing Agency: Macquarie University

Stakeholders: leading experts and organizations in the fields of mercury management: UNEP, Global Mercury Partnerships, IEA Clean Coal Centre, Parties of the Conventions, Convention Secretariats, relevant civil society groups, including members of the Partnership on Mercury Control in Coal Combustion (e.g. International POPs Elimination Network (IPEN), Zero Mercury Working Group).

1.3 Project Contact

Division(s) Implementing the project

Industry and Economy Division

Executing Agency(ies)

Maquarie University

Name of co-implementing Agency

Names of Other Project Partners

UNEP Knowledge and Risk Unit

TM: UNEP Portfolio Manager(s)

Kevin Helps

EA: Manager/Representative

Nathan Hart

TM: UNEP Task Manager(s)

Alexander Romanov

EA: Project Manager

Peter Nelson

TM: UNEP Budget/Finance Officer

Anuradha Shenoy

EA: Finance Manager

Sheley Kurniawan

TM: UNEP Support/Assistant

EA: Communications lead, if relevant

2- OVERVIEW OF PROJECT STATUS

2.1 UNEP PoW & UN

TM: UNEP Current Subprogramme(s)

Chemical and Pollution Action

TM: UNEP previous Subprogramme(s)

N/A

TM: PoW Indicator(s)

3.4, 3.9

EA: UNSDCF/UNDAF linkages

UNDAF: (1) Risk-informed development programming entails a multidimensional approach to managing disaster risks and climate impacts, (2) Coherent policy support, (3) Partnerships for results. Inclusive, strategic and mutually beneficial partnerships at global, regional, national and local levels. UNSDCF: (1) Collective response to help countries address national priorities and gaps in their pathway towards meeting the SDGs, (2) partnerships with host governments, but also partnerships with all stakeholders – civil society, academia, parliaments, the private sector, bilateral partners - to leverage strengths and drive transformative change, (3) move beyond national averages to look at more specific data, with a strengthened focus on inclusion and tackling inequalities, (4) Provide tools and guidance to tailor responses to a Member State's specific needs and realities

EA: Link to relevant SDG Goals

3, 7, 12, 13, 17

EA: Link to relevant SDG Targets

3.9, 3.D, 7.A, 12.2, 12.4, 12.A, 13.2, 13.B, 17.9, 17.4, 17.16

2.2. GEF Core or Sub Indicators

TM: GEF core or sub indicators targeted by the project as defined at CEO Endorsement/Approval, as well as results

Indicators	Targets - Expected value			Materialised to date
	Mid-term	End-of-project	Total Target	
✓ 6: Greenhouse gas emissions mitigated		Reduction potential for the coal sector to be determined during the project		50%
✓ 9: Chemicals of global concern and their waste reduced		3 countries will commit to follow the project recommended technology for emissions reduction		20%
✓ 11: People benefitting from GEF-financed investments		Reduction potential for the coal sector to be determined during the project		50%
✓ 11.1: Male		112		-
✓ 11.2: Female		48		-
✓				

Implementation Status

2023

1st PIR

FY 2023

FY 2022

FY 2021

FY 2020

FY 2019

FY 2018

FY 2017

FY 2016

FY 2015

PIR #

1st PIR

Rating towards outcomes (DO)
(section 3.1)

S

Rating towards outputs (IP)
(section 3.2)

S

Risk rating
(section 4.2)

L

2.3 Implementation status & Risks

EA: Summary of status
(will be uploaded to GEF Portal)

The project is predominantly on track for achieving the expected outcomes and results during the PIR1 period.

Under Component 1, the project team compiled an extensive repository of energy databases, government and non-government reports, and relevant scientific literature on global emissions and energy development plans to estimate potential greenhouse gas, mercury, and persistent organic pollutant reduction figures and scenarios from the coal-fired power plant (CFPP) and coal-fired industrial boiler (CFIB) sectors. Furthermore, a unit-specific global interactive database was created to provide insights into country-specific CFPP capacity development, CO2 emissions, and mercury emissions forecasts. It helped customize possible emission reduction scenarios until 2050 for countries that still heavily rely on coal-fired power generation for their energy security.

The project encountered challenges related to limited country-specific data and research on current emissions from the CFIB sector, particularly in comparison to the available information on the CFPP sector. Additionally, estimating country-specific emissions of persistent organic pollutants (POPs) were proven difficult due to the dominant role plant design and operating conditions play in determining POPs emissions. Consequently, incorporating these emissions forecasts from the coal sector introduced a significant level of uncertainty and necessitates making certain assumptions. The project team has developed a plan to minimize where possible negative effects from the identified uncertainties, including identification of additional sources of relevant data, and application of statistical analysis tools.

Under Component 2, several engagement activities were carried out to disseminate initial country-specific emissions forecasts (e.g. IOMC mercury expert group meetings, 2023 ICSC meetings on coal power generation in Indonesia, and others). The insights gained from these engagement activities helped the project team identify key components among the focus countries, which will be crucial for future projects aimed at achieving significant emissions mitigation in the coal sector. In the process, a series of country-specific reports was drafted, encompassing essential details such as country profiles regarding coal-fired energy production, commitments to various UN Conventions, mercury emissions forecasts from their CFPP sector under different scenarios, and the potential for emissions mitigation through ongoing and planned energy development plans and policies. In parallel, the project identified challenges in energy security and equity across the globe, which emerged from recent global events over the past three years, including some developed and developing countries shifting back to fossil fuels. Related uncertainty regarding future emissions will be further assessed and factored in the overall assessment and emission projections.

Regarding the financial progress over the PIR1 period, the project expenditures (\$303,193) since the 1st disbursement largely matched the forecasted amount (\$347,959). It is expected that the expenditures will continue to follow the forecast in the next reporting period.

2.4 Co-finance

EA: Planned Co-finance

660 000,00

EA: Actual to date:

\$ 198,000; 30%; 01/10-2021 - 30/06/2023

EA: Justify progress in terms of materialization of expected co-finance. State any relevant challenges.

The Executing Agency has made an additional cash contribution of \$20,000, resulting in a revised planned co-finance amount of \$660,000.00. Currently, one-third of the committed co-financing was realized, from which in-kind contributions from the project stakeholders are expected to see a significant increase once draft project reports are circulated to expert groups for their review and comments. An increase in the in-kind contributions from the Executing Agency is also anticipated during quarters 2 and 3 of 2024. This increase will facilitate the continuation of stakeholder engagement and expert feedback on project results, including the coordination of quarterly project reporting commitments. The project team aims to enhance engagement by participating in global conferencing events such as COP5 (Oct-Nov 2023), ICMGP (Jul 2024), and MEC16 (date to be determined in 2024). However, accurately estimating the in-kind contributions resulting from these engagements remains challenging.

2.5 Stakeholder

EA: Date of project steering committee meeting

01 March 2023

EA: Stakeholder engagement
(will be uploaded to GEF Portal)

Project activities provided insights into the challenges inherent in future emissions estimations. Focus countries, mainly in Asia with developing economies, heavy coal reliance, and substantial mercury emissions, compiled for in-depth exploration to identify relevant stakeholders.

Stakeholder engagement benefited by links with the Global Mercury Partnership, and included a project inception workshop, project steering committee meetings, discussions with technical expert groups, and presentations of country profiles during international conferences, workshops, and implementing agency meetings.

2.6. Gender

TM: Does the project have a gender action plan?



No

EA: Gender mainstreaming
(will be uploaded to GEF Portal)

While not having specific gender targets, the project will introduce an assessment tool, guided by a gender expert, to estimate direct beneficiaries categorized by gender. This will be accomplished by considering gender-related aspects of global energy transition and emissions control from the coal sector, including the need for gender-inclusive solutions during the transition from fossil fuel energy generation, and the promotion of equitable health outcomes.

2.7. ESSM

TM: Was the project classified as moderate/high risk at CEO Endorsement/Approval Stage?



No

TM: If yes, what specific safeguard risks were identified in the SRIF/ESERN?

TM: Have any new social and/or environmental risks been identified during the reporting period?



No

TM: If yes, please describe the new risks, or changes

TM & EA: Has the project received complaints related to social and/or environmental impacts (actual or potential) during the reporting period?



No

TM & EA: If yes, please describe the complaint(s) or grievance(s) in detail including the status, significance, who was involved and what actions were taken.

EA: Environmental and social safeguards management
(will be uploaded to GEF Portal)

The project activities are limited to desktop studies and are identified as representing low environmental and social impact risk. To date, there have been no matters that required risk intervention.

2.8. KM/Learning

EA: Knowledge activities and products
(will be uploaded to GEF Portal)

At present, the project activities produced a comprehensive strategy to estimate future mercury emissions reduction potential coming from the coal-fired power plant sector. Presentations to stakeholders and comprehensive project reports will inform global emissions mitigation strategies, and the identification of focus countries that have the potential for the largest reduction potential.

Please attach a copy of any products

EA: Main learning during the period

Global uncertainties regarding energy security and equity, coupled with delays in renewable energy infrastructure to secure baseline electricity provision are creating challenges towards a rapid just energy transition in some regions of the world, including a continued reliance on coal as a primary energy resource. This presents challenges to the required by the Paris Agreement signatories to accelerate the transition away from coal. The project activities are contributing to the consolidation of knowledge on global coal-fired power plant development and emissions mitigation plans, focusing on focus countries that are now and in the future still highly dependent on coal.

The project activities successfully established baseline data for estimating future carbon and mercury emissions from coal-fired power generation. Ongoing engagement with stakeholders helps monitor energy sector developments, shaping realistic projections for coal capacity, greenhouse gas, and mercury emissions in these countries. Project learnings suggest a need for emissions control technologies resulting in a co-benefit for mercury emissions reduction, rather than specific mercury control. Ongoing stakeholder involvement is aiding in the understanding of country-specific challenges and progress toward emissions improvements and a just energy transition in the coal sector.

EA: Stories to be shared
(section to be shared with communication division/ GEF communication)

In the whirlwind of recent global events, a global consensus is reached to accelerate efforts in reducing the overall reliance on fossil fuels. The need for equitable and sustainable energy shifts are needed for both climate action and to reduce the unnecessary health burden associated with their atmospheric emissions.

Although projections are pointing to a peak in coal-fired power production by 2030-2035, backed by data showcasing the planned retirements of existing and new plants, emissions from this sector are already likely to peak sooner because the replacement of aging fleet with modern plants equipped with efficient multi-pollutant control technologies. This is a welcome development but needs to be supported by accelerated climate action and similar developments in the industrial boiler sector.

A just energy transition pathway for many emerging economies is needed and requires the early retirement of coal-fired plants. However many countries cannot afford the risk to their energy security of deploying this strategy too quickly. Hence evaluation of the best available technologies and best environmental practices (BAT/BEP) for such coal-reliant countries is a high priority for this project.



To Step 2

3. RATING PROJECT PERFORMANCE

3.1 Rating of progress towards achieving the project outcomes (Development Objectives)

Project objective and Outcomes	Indicator	Baseline level	Mid-Term Target or Milestones	End of Project Target	Progress as of current period (numeric, percentage, or binary entry only)	EA: Summary by the EA of attainment of the indicator & target as of 30 June	TM: Progress rating
Objective							
Demonstrate mercury and POPs emissions reduction potential from coal-fired power plants and industrial boilers in order to support governments in implementing control and reduction strategies for new and existing sources	N. of mercury/POPs/GHG reduction and elimination projects/strategies	Industrial sources account for 55% of the total Hg emissions Many countries continue in investing or plan to invest in CFPP in the future	N/A	Complete and comprehensive date and case studies (at least 10) lead to the endorsement of high potential countries (at least 3) to commit to the development of future projects]	0	<p>The project made significant progress by compiling a comprehensive inventory of technical reports, energy databases, government energy statistics, and scientific literature. These valuable resources contain various case studies and emissions inventories related to the coal sectors of different countries.</p> <p>From this extensive research, the project identified eight high-potential countries: China, India, Indonesia, Vietnam, Thailand, Malaysia, and South Africa. These nations continue to rely on coal-fired power infrastructure to meet their energy demands and foster economic growth.</p> <p>To aid in emissions reduction efforts, the project developed a unit-specific database providing an outlook on global coal-fired power plant capacity and CO2/mercury emissions up to 2050. This database offers valuable advice on realistic modifications to three overarching scenarios (business-as-usual, early retirement, and air pollution control retrofit). By tailoring specific actions to each country, the potential emissions reduction can be demonstrated.</p> <p>Through this work, the project team aims to guide these countries towards sustainable energy practices and contribute to global efforts in mitigating emissions from the coal sector. It's important to note that these predictions are subject to rapidly changing energy supply and security developments, and also to changing geopolitical circumstances.</p>	5
Outcome 1							
Estimated mercury/POPs/GHGs reductions and future scenarios for CFPPs and industrial boilers management are endorsed by high potential countries	N. of countries endorsing the results of emissions reduction potential and future scenarios	Best available information on coal sector contribution to Hg and POPs emission	N/A	Countries endorsing the results of emissions reduction potential and future scenarios: 5	0	<p>This project component has been instrumental in gaining valuable insights into the current status of the eight focus countries' short-term energy development plans, their commitments towards various UN Conventions on climate action, and their efforts to control emissions from the coal sector. This knowledge was acquired through an extensive literature review and meticulous data sourcing.</p> <p>Furthermore, a specialized coal-fired power plant database containing various scenarios was created. It can be customized based on each country's capabilities to transition away from coal or enhance their emissions control technologies. This database serves as a powerful tool to support decision-making processes and advise on appropriate strategies for emissions reduction in the coal sector for each focus country.</p>	5

Outcome 2

High reduction potential countries committed to develop projects to address emissions from the CFPPs and industrial boilers	No. of high reduction potential countries committed to develop future projects in coal sector	Findings in component 1	N/A	No. of countries committed to develop projects: 3	0	<p>As significant progress in baseline data gathering and interpretation activities under Outcome 1 was made, communication and engagement efforts intensified. Given that the focus countries are primarily located in Southeast Asia, the attention will be directed towards identifying at least three countries where high-impact projects can be developed.</p> <p>Drawing from the valuable experiences and successful achievements in Indonesia, the project team gained valuable lessons and methodologies for identifying projects that have the potential to make a substantial impact on emissions mitigation. The aim is to extend these successful practices to Malaysia, the Philippines, and Vietnam.</p> <p>By applying the knowledge and insights gained in Indonesia, similar projects can be implemented in these countries to contribute effectively towards reducing emissions and promoting sustainable practices in their coal sectors. This approach will foster collaboration and mutual learning among the focus countries and facilitate the adoption of best practices across the region.</p>	MS
---	---	-------------------------	-----	---	---	--	----

For joint projects and where applicable ratings should also be discussed with the Task Manager of co-implementing agency.

3.2 Rating of progress implementation towards delivery of outputs (Implementation Progress)

Output	Expected completion date	Implementation status as of 30 June 2022 (%) (Towards overall project targets)	Implementation status as of 30 June 2023 (%) (Towards overall project targets)	EA: Progress rating justification, description of challenges faced and explanations for any delay	TM: Progress rating
Under Comp 1					
1.1.1 Scientific data on mercury/POPs/GH Gs from CFPPs reviewed, summarised and disseminated to relevant stakeholders	Okt.23	N/A	80%	<p>[No. of technical publications reviewed - baseline: 0 - target 10] = 10 [No. of stakeholders with access to scientific data - baseline: 0 - target 20] = see comments below</p> <p>Although the project activities have not as yet provided stakeholders with direct access to the scientific data from the reviews of technical publications, some results were reviewed and visualized through various technical- and non-technical presentations spanning over a wide range of audiences. Examples include the dissemination of preliminary project findings during the project inception workshop, project steering committee meetings, the ICMGP conference, GMP and IOMC meetings, and workshops hosted by the ICSC in Indonesia.</p> <p>The review of technical publications is ongoing, and is being updated as they become available. Such updates need to be incorporated into the reports to maintain their accuracy and relevance. The project team has already compiled an extensive repository of technical publications and reports, providing both global and country-specific perspectives to support various project activities.</p> <p>To foster collaboration and knowledge dissemination, it is planned to make this repository accessible to stakeholders. Additionally, review reports summarizing the data and information resources will be shared with them to promote transparency and informed decision-making. We are pleased to have already shared the repository of country-specific reports and scientific literature with the ICSC.</p>	HS

1.1.2 Impact of UNFCCC Paris Agreement commitments and targets on coal sector emissions analysed and disseminated to relevant stakeholders	июл.22	N/A	90%	<p>[No. of estimates of GHG reduction from coal sector - baseline: 0 - target 8] = 5</p> <p>[No. of stakeholders with access to data - baseline: 0 - target 20] = 0</p> <p>Estimating greenhouse gas (GHG) emissions reduction from the coal-fired industrial boiler sector was proven to be a challenging task for the project. While the focus has primarily been on estimating current and future CO2 emissions from the coal-fired power plant sector, the project team have not yet produced similar estimates for other greenhouse gases, such as methane and nitrous oxide, that also emanate from the coal sector.</p> <p>Nonetheless, the project made significant progress in estimating CO2 emissions outlook up to 2050 on a country-specific level for the coal-fired power plant sector. This achievement was possible through the utilization of a comprehensive database provided by the Global Energy Monitor. Upon completion of the focus country reports, the project team plans to disseminate the results to relevant stakeholders. Sharing these findings will facilitate discussions and promote informed decision-making on emissions reduction strategies in the coal sector.</p> <p>It is essential to recognize that ongoing developments and improvements are being made by Parties to the Paris Agreement in their climate action commitments. The project team is mindful that potential revised commitments during COP28 will fall within the project period, and the project will ensure to include them in the final reporting to the Project Sponsor. By staying updated with the latest developments and incorporating all relevant information, the project aims to produce a comprehensive and robust final report that aligns with the most current climate action commitments and advances our understanding of emissions reduction potential in the coal sector.</p>	S
1.1.3 Potential mercury/POPs/GHG reduction figures and scenarios from CFPPs produced and disseminated to relevant stakeholders	анр.23	N/A	50%	<p>[No. of estimates and scenarios for emissions reductions - baseline: 0 - target 5] = 5</p> <p>[No. of stakeholders with access to scientific data - baseline: 0 - target 20] = 0</p> <p>The project has focused on estimating both country-specific and global potential reductions in CO2 and mercury emissions from the coal-fired power plant sector. These estimates have been supported by various scenarios, considering business-as-usual, early retirement of coal power plant units, and potential improvements to the existing coal fleet through the implementation of multi-pollutant control devices.</p> <p>Although estimating emissions and forecasts for persistent organic pollutants (POPs) on a country-by-country basis is challenging due to limited information, the project acknowledges the co-benefits of multi-pollutant control technologies in reducing POPs emissions. To address this, we are preparing a perspectives report on POPs emissions profiling on a global context, drawing support from available technical reports and scientific literature.</p> <p>In addition, profiling the development and future plans of the coal-fired industrial boiler sector on a country-specific level has also posed challenges due to limited information for some of the focus countries. Nevertheless, the project will thoroughly review and consider this limitation in our project activities. Where available, technical reports and scientific literature on this topic for the focus countries will be included to provide a comprehensive perspective.</p>	MS
Under Comp 2					
2.1.1 Synthesis of results from completed/ongoing CFPP projects produced and disseminated	июл.23	N/A	30%	<p>[No. of projects/reports reviewed - baseline: 0 - target 10] = 5</p> <p>[No. of stakeholders with access to the synthesis of results - baseline: 0 - target: 20] = 0</p> <p>Project activities to date already identified some lessons learned from completed and ongoing projects, but still limited mostly to Indonesia and India, from which the focus is expected to be expanded to the other focal countries as well. While most ongoing/future projects are based on exploring options to transition away from coal-fired power production, it is still inevitable that a focus can still be placed on evaluating the co-benefit of improved air pollution control in existing coal-fired infrastructure for countries that are facing challenges in their transition to renewable energy as a primary resource. Although such conclusions and reviews were not yet shared with stakeholders through access to the synthesis of results, these insights were still shared with a wide stakeholder audience as described previously.</p> <p>As new literature becomes available, we continue to identify completed and ongoing projects relevant to our research. Notably, we have made significant progress in reviewing and summarizing reports that detail the advancements made in specific countries, with a focus on Vietnam, Indonesia, India, and China. These reports shed light on the improvements and modernization efforts undertaken in existing coal-fired power plants. Our external stakeholders, including the ICSC and UNEP, as well as government reports from India, China, and Vietnam, have been valuable sources of information in this regard.</p> <p>While the project has engaged stakeholders through expert group meetings and participated in activities organized by the ICSC in Indonesia, it is anticipated that further insights and lessons learned will emerge during the final phase of the project period. Once project reports are circulated to external stakeholders for their review, the project team expects to receive valuable feedback and additional perspectives, enriching the final outcomes of the project.</p>	MS

2.1.2 Selection criteria for future projects based on highest impact potential defined and disseminated	OKT.23	N/A	20%	<p>[No. of selection criteria for candidate countries - baseline 0 - target 5] = 4</p> <p>To ensure the identification of country-specific selection criteria for future projects with the highest potential for improved emissions mitigation in the coal sector, the project recognizes the need to increase engagement with project stakeholders. While some level of selection has already been identified through past and ongoing activities, primarily focused on India, Indonesia, Vietnam, and the Philippines, the project still needs to report on criteria that can be considered for the remaining focus countries.</p> <p>Engaging stakeholders from the focus countries will be crucial in defining the selection criteria. Their expert feedback on the project reports, once completed, will provide valuable insights and perspectives, enabling us to tailor the criteria to the specific needs and challenges of each country.</p> <p>As part of the selection criteria process, the project team wishes to provide some guidance on additional elements that can be added to the existing BAT/BEP guidance. This will involve identifying treatment and management options that are most feasible and effective for each focus country's unique circumstances. This will require us to explore and consider novel technologies that can be integrated into the BAT/BEP guidance to support compliance with the Minamata Convention and the Paris Agreement.</p>	5
2.1.3 Policy guidance developed and disseminated to assist public and private sectors in their decision making processes toward emission controls in the coal sector	RHB.24	N/A		<p>[No. of policy guidance produced - baseline: 0 - target 1] = N/A</p> <p>[No. of public and private stakeholders with access to policy guidance: baseline 0 - target 20 (at least 1/3 women)] = N/A</p>	
2.1.4 Detailed reports and communication materials on project findings developed and disseminated through dedicated platform	OKT.24	N/A		<p>[No. of outreach material produced - baseline: 0 - target: 1] = N/A</p> <p>[No. of stakeholders reached - baseline: 0 - target: 20 (at least 1/3 women)] = N/A</p>	

The Task Manager will decide on the relevant level of disaggregation (i.e. either at the output or activity level).



4 Risk Rating

4.1 Table A. Project management Risk

Please refer to the Risk Help Sheet for more details on rating

Risk Factor		EA's Rating	TM's Rating
1	Management structure - Roles and responsibilities	Low : Well developed, stable Management Structure and Roles/responsibilities are clearly defined/understood. Low likelihood of potential negative impact on the project delivery.	✓ Low : Well developed, stable Management Structure and Roles/responsibilities are clearly defined/understood. Low likelihood of potential negative impact on the project delivery.
2	Governance structure - Oversight	Low : Steering Committee and/or other project bodies meet at least once a year and Active membership and participation in decision-making processes. SC provides direction/inputs. Low likelihood of potential negative impact on the project delivery.	✓ Low : Steering Committee and/or other project bodies meet at least once a year and Active membership and participation in decision-making processes. SC provides direction/inputs. Low likelihood of potential negative impact on the project delivery.
3	Implementation schedule	Low : Project progressing according to original work plan and Adaptive management is practiced and regular monitoring. Low likelihood of potential negative impact on the project delivery.	✓ Low : Project progressing according to original work plan and Adaptive management is practiced and regular monitoring. Low likelihood of potential negative impact on the project delivery.
4	Budget	Low : Activities are progressing within planned budget and Balanced budget utilisation including PMC. Low likelihood of potential negative impact on the project delivery.	✓ Low : Activities are progressing within planned budget and Balanced budget utilisation including PMC. Low likelihood of potential negative impact on the project delivery.
5	Financial Management	Low : Funds are correctly managed and transparently accounted for and Audit reports provided regularly and confirm correct use of funds. Low likelihood of potential negative impact on the project delivery.	✓ Low : Funds are correctly managed and transparently accounted for and Audit reports provided regularly and confirm correct use of funds. Low likelihood of potential negative impact on the project delivery.
6	Reporting	Low : Substantive reports are presented in a timely manner and Reports are complete and accurate with a good analysis of project progress and implementation issues. Low likelihood of potential negative impact on the project delivery.	✓ Low : Substantive reports are presented in a timely manner and Reports are complete and accurate with a good analysis of project progress and implementation issues. Low likelihood of potential negative impact on the project delivery.
7	Capacity to deliver	Low : Sound technical and managerial capacity of institutions and other project partners and Capacity gaps were addressed before implementation or during early stages. Low likelihood of potential negative impact on the project delivery.	✓ Low : Sound technical and managerial capacity of institutions and other project partners and Capacity gaps were addressed before implementation or during early stages. Low likelihood of potential negative impact on the project delivery.

If any of the risk factors is rated a Moderate or higher, please include it in Table B below

4.2 Table B. Risk-log

Implementation Status (Current PIR)

1st PIR

Insert ALL the risks identified either at CEO endorsement (inc. safeguards screening), previous/current PIRs, and MTRs. Use the last line to propose a suggested consolidated rating.

Risk	Risk Rating								Variation respect to last rating	
	Risk affecting:	CEO ED	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	PIR 6	Δ	Justification
Outcome / outputs										
Objective	Involvement Risk - Lack of interest by key decision-makers to utilize analysis findings and selection criteria to tackle mercury/POPs emissions from the coal sector	L	L						=	
Objective	Insufficient Data Availability - Lack of data results in inconclusive analyses and findings	L	L						=	There is limited country-specific data on coal-fired industrial boiler industry compared to those obtained for the coal-fired power plant sector.

Environmental and Social Risks - Negative environmental and/or social impact of project activities.Negative impact of climate change on project activities.
Political Risk - Change in political priorities limits impact of project findings.
Investment Risk - The private sector is not willing to commit the required funds to reduce mercury/POPs emissions.
Coordination Risk - Lack of coordination between project stakeholders hinders holistic intervention that targets mercury, POPs and GHG emissions.
Reporting - Delays in dissemination of project results to stakeholders

Objective	L	L						=	
Objective	L	L						=	
Objective	M	L						↓	<p>The risk does not directly impact delivering the project outputs/outcomes and therefore has been downgraded to LOW. However, it is likely to adversely affect its longer-term sustainability if governments and industry show a reduced investment appetite to reduce mercury emissions specifically. It is probable that mercury emissions alone are unlikely to determine management or decision-making for either transitioning away from coal-fired energy generation or improving emissions abatement in new and existing plants.</p> <p>The prospects for progress in multi-stakeholder initiatives like the Just Energy Transition Partnerships and Energy Transition Mechanisms are optimistic to result in substantial global emission reductions, including mercury emissions from the coal industry.</p>
Objective	L	L						=	
Outputs	Not Applicable	L						=	<p>Some delays are expected in sharing project activity reports with the relevant stakeholders due to our continuous efforts to acquire and incorporate new information. To address this, the project recognizes the importance of enhancing our engagement efforts and seeking feedback from an expert panel of stakeholders.</p> <p>Moreover, there have been slight delays in submitting our quarterly progress and expenditure reports to the IA. These delays arise from the multiple levels of authorization required to approve certain aspects of the reporting content.</p>

<p>Budget - Spending on some budget lines are not possible; amendment is requested</p>	Outcome	Not Applicable	L							=	<p>Certain planned expenditures for specific budget lines were not feasible, particularly in regards to the training budget component for the project inception workshop and steering committee meetings. The reason behind this limitation was the implementation of virtual meetings in response to international travel restrictions during that period.</p> <p>The project team can reallocate the funds to better support the project's core objectives without requiring an increase in the total agreed GEF budget. One area of focus could be allocating these resources to cover project staff salaries and facilitate travel for project-related engagements during upcoming events that are instrumental to the successful delivery of project activities.</p>

Consolidated project risk			L								This section focuses on the variation. The overall rating is discussed in section 2.3.
---------------------------	--	--	---	--	--	--	--	--	--	--	--

4.3 Table C. Outstanding Moderate, Significant, and High risks

List here only risks from Table A and B above that have a risk rating of M or higher in the current PIR

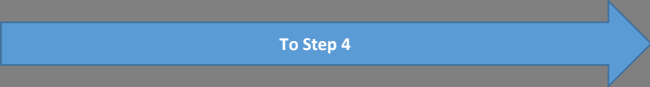
Risk	Actions decided during the previous reporting instance (PIRt-1, MTR, etc.)	Actions effectively undertaken this reporting period	Additional mitigation measures for the next periods		
			What	When	By whom

High Risk (H): There is a probability of greater than 75% that **assumptions** may fail to hold or materialize, and/or the project may face high risks.

Significant Risk (S): There is a probability of between 51% and 75% that **assumptions** may fail to hold and/or the project may face substantial risks.

Moderate Risk (M): There is a probability of between 26% and 50% that **assumptions** may fail to hold or materialize, and/or the project may face only modest risks.

Low Risk (L): There is a probability of up to 25% that **assumptions** may fail to hold or materialize, and/or the project may face only modest risks.





Project Minor Amendments

Minor amendments are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5% as described in Annex 9 of the Project and Program Cycle Policy Guidelines. Please tick each category for which a change occurred in the fiscal year of reporting and provide a description of the change that occurred in the textbox. You may attach supporting document as appropriate.

5.1 Table A: Listing of all Minor Amendment (TM)

Minor amendments	Changes
Results framework	No
Components and cost	Yes
Institutional and implementation arrangements	No
Financial management	No
Implementation schedule	Explain in table B
Executing Entity	No
Executing Entity Category	No
Minor project objective change	No
Safeguards	No
Risk analysis	No
Increase of GEF project financing up to 5%	No
Co-financing	Yes
Location of project activity	No
Other	No

Minor amendments
<p>A discussion was held with the Implementing Agency to request a change in the budget line allocations. The purpose of this change was to accommodate an extension of the PDRA (Post-Doctoral Research Associate) position in the project and allocate additional travel funds for project-related activities. Importantly, these changes did not lead to any deviation from the total GEF (Global Environment Facility) budget that was initially approved. Instead, funds were reallocated within each component to meet these specific needs.</p> <p>Furthermore, the Executing Agency increased the cash component of the co-financing by USD 20,000. This increase was specifically intended to support the salaries of ongoing project staff, ensuring their continued dedication and contribution to the project's success.</p> <p>These budget adjustments were made in accordance with project requirements and align with the overall objectives and approved project funding.</p>

5.2 Table B: History of project revisions and/or extensions (TM)

Version	Type	Signed/Approved by UNEP
Original Legal Instrument		

Entry Into Force (last signature Date)	Agreement Expiry Date	Main changes introduced in this revision
30.09.2021	30.09.2024	Programme Cooperation Agreement (PCA) with Macquarie University (extended timeline of the workplan)

GEO Location Information:

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate. Web mapping applications such as OpenStreetMap (<https://www.openstreetmap.org/#map=4/21.84/82.79>) or GeoNames(<http://www.geonames.org/>) use this format. Consider using a conversion tool as needed, such as: <https://coordinates-converter.com> Please see the Geocoding User Guide by clicking [here\(https://gefportal.worldbank.org/App/assets/general/Geocoding%20User%20Guide.docx\)](https://gefportal.worldbank.org/App/assets/general/Geocoding%20User%20Guide.docx)

Location Name Required field	Latitude Required field	Longitude Required field	Geo Name ID Required field if the location is not an exact site	Location Description Optional text field	Activity Description Optional text field

Please provide any further geo-referenced information and map where the project interventions is taking place as appropriate. *

[Annex any linked geospatial file]

