



# **Project Implementation Report**

(1 July 2023 – 30 June 2024)

Project Title:	POPs and mercury-free solutions for environmentally sound waste management in Paraguay
GEF ID:	10682
UNIDO ID:	200228
GEF Replenishment Cycle:	GEF-7
Country(ies):	Paraguay
Region:	LAC - Latin America and Caribbean
GEF Focal Area:	Chemicals and Waste (CW)
Integrated Approach Pilot (IAP) Programs <sup>1</sup> :	N/A
Stand-alone / Child Project:	Stand-alone
Implementing Department/Division:	TCS/CEG/RMC
Co-Implementing Agency:	N/A
Executing Agency(ies):	<ul> <li>Technological Laboratory of Uruguay (Laboratorio Tecnológico del Uruguay - LATU)</li> <li>Centre for Environmental and Social Studies (Centro de Estudios Ambientales y Sociales – CEAMSO)</li> </ul>
Project Type:	Full-Sized Project (FSP)
Project Duration:	60 months
Extension(s):	0
GEF Project Financing:	4,000,000
Agency Fee:	380,000
Co-financing Amount:	70,098,373
Date of CEO Endorsement/Approval:	12/5/2022

<sup>&</sup>lt;sup>1</sup> Only for **GEF-6 projects**, if applicable

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UNIDO Approval Date:	2/13/2023
Actual Implementation Start:	5/04/2023
Cumulative disbursement as of 30 June 2024:	USD 1,390,461.8
Mid-term Review (MTR) Date:	12/1/2025
Original Project Completion Date:	2/28/2028
Project Completion Date as reported in FY23:	N/A
Current SAP Completion Date:	2/28/2028
Expected Project Completion Date:	2/28/2028
Expected Terminal Evaluation (TE) Date:	12/01/2027
Expected Financial Closure Date:	2/28/2029
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## I. Brief description of project and status overview

#### **Project Objective**

- (i) The project objective is to transform the linear, wasteful solid waste management sector in Paraguay into an environmentally sound and sustainable model by restricting the type of products imported, promoting awareness, segregating and managing hazardous POPs and mercury-containing fractions in an environmentally sound way.
- (ii) The core indicators are:
  - 34,000 ton CO2 eq/year of greenhouse gas emissions mitigated (metric tons of CO2e).
  - 9.37 ton/year of PFOs reduced, disposed/destructed, phase out, eliminated and avoided of chemicals of global concern and their waste in the environment and in processes, materials and products (metric tons of toxic chemicals reduced).
  - 2.95 ton//year of Hg reduced, disposed/destructed, phase out, eliminated and avoided of chemicals of global concern and their waste in the environment and in processes, materials and products (metric tons of toxic chemicals reduced).
  - 10.2 g TEQ of POPs emissions reduced, avoided to air from point and non-point sources (grams of toxic equivalent gTEQ).
  - 5,100 direct beneficiaries are disaggregated by gender as a co-benefit of GEF investment (60% male/40 % female).

#### **Baseline**

Baseline for policy, legislation and environmental sound management (ESM)

Specific legislation on comprehensive solid waste management is in force in Paraguay, specifically Law 3,958/09 on Comprehensive Solid Waste Management and its regulatory decree. Precisely this law assigns the Ministry of Environment and Sustainable Development as the national enforcement authority and the governorates and municipalities at the local level. Within this framework, in 2020 MADES elaborated and promulgated the National Plan

<sup>&</sup>lt;sup>2</sup> Person responsible for report content

for Comprehensive Management of Solid Waste. This National Plan constitutes a guideline for the elaboration of the Governmental and Municipal Plans, respectively. In order to contribute to the local authorities, MADES has promulgated resolutions that provide operability to the management of urban solid waste and hazardous solid waste. Likewise, as technical instruments and as a contribution to the Municipalities, it has promulgated the Guide for the Characterization of Solid Waste and the Guide for the Preparation of Municipal Plans for the Comprehensive Management of Urban Solid Waste.

The management of solid urban waste by law is strictly a municipal responsibility and competence, municipalities have a duty and commitment to collect and transport all waste produced by the community, provide proper treatment and the final destination of waste, thus ensuring the welfare of the community population, as well as the protection of the environment. The management of municipal authorities is essential for the comprehensive management of municipal solid waste. They have the responsibility of executing, raising awareness and uniting actions between the different sectors involved: citizens, technicians, private companies, NGOs and the local government.

The Ministry of Public Health and Social Welfare (MSPyBS), is the enforcement authority of Law 3,361/07 on Comprehensive Management of Waste generated in Health and Related Establishments and its regulatory decree. Within the framework, MSPyBS has issued a Manual of Procedures for the Comprehensive Management of Waste generated in Health and Related Establishments, which contributes to the application of clean technologies and practices that reduce the amount of waste, as well as pollution associated with waste mishandling.

In spite of this body of laws, none of the stages of chemical life-cycle management are adequately covered. The industrial chemicals sector has the fewest legal instruments compared to agricultural and public consumption chemicals. However, both the industrial and commercial sectors are the ones that best manage their waste, due to Law 294/93 on Environmental Impact Assessment and its decree, which contemplate a procedure for periodic review and rectification of the environmental management of different projects. Conversely, this does not apply to urban waste, with all types of waste (mixed organic, inorganic and hazardous) tending to end up in landfills, as it is not segregated at source. This represents a significant challenge for the various municipalities.

Currently, city by-laws have to deal with the challenge of dozens of uncontrolled dumpsites. The generation of solid wastes in the country is of 1.120 kg/inhab/day for domestic solid wastes, meanwhile urban solid wastes are of 1.314 kg/inhab/day. Only 53% of urban wastes is collected. Regarding its composition, 61% of this waste is organic and 38.9% is inorganic. In its different phases of management (generation and inadequate storage, inadequate disposal on public roads, collection and transportation, segregation, treatment and final disposal) there are several environmental risks; among the most important ones are air and water contamination, and morbid processes from infectious contagious and parasitical diseases, allergic diseases (respiratory, skin and mucosa), occupational diseases and accidents, intoxications to chronic degenerative diseases. The disposal of industrial solid wastes as part of municipal solid wastes is also very dangerous due to leakages and unsound disposal methods. It is assumed that in particular waste from households, not serviced by waste collection vehicles (around 30–40%), ends up on uncontrolled dumpsites, next to roadsides, in backyards and in local water bodies.

The low coverage of collection services contributes to aggravate runoffs and flooding during intense rains since garbage obstructs the storm drains. This situation is particularly concerning due to the lack of separation of municipal solid wastes from hazardous wastes, including products containing POPs or Hg. In addition, there are municipal dumpsites, e.g. Cateura landfill, for which open burning of waste has been documented in order to extract valuable metals or to reduce the waste volume.

#### Baseline projects for capacity-building and ESM management of waste

To strengthen the environmentally sound management of solid wastes and limit hazardous wastes the "Manual of Integral Management of Municipal Solid Wastes" was elaborated as a tool to facilitate the management and sustainability of plans for the community management of solid wastes. This manual provides the municipalities, who are legally responsible for the management of municipal solid wastes, with guidelines to be able to fulfil certain components of integral management and to ensure continuity.

With this manual, it is expected that the municipalities will start to gradually implement the different points of the waste management pyramid (Reduction- Reutilization- Recycling- Final Appropriate Disposal) to reduce open burning activity or reduce the volume of burning in dumpsites. However, only some industries and hospitals have started internal recycling programs for the re-use of materials, or sell industrial wastes for co-processing or incineration (e.g. as fuel), there are no regulated standards for separate environmentally sound waste streams of hazardous materials. Thus, hazardous wastes materials and products containing POPs or Hg will end up in landfills or dumpsites, where they will be burnt resulting in the release of u-POPs and Hg emissions.

Adoption of ESM principles is also very important for Paraguay due to the significant economic growth since 2004. The sectors with the greatest contribution to Gross Domestic Product (GDP) are agriculture, industry and livestock and GDP has been steadily increasing from 2004 to 2014, subsequently remaining at maximum values with certain fluctuations. According to official data, the primary sector (agriculture and livestock) has had an important impact on economic growth in Paraguay since 2004. Between 2004 and 2014, the agricultural sector contributed, on average, 19% to the growth of the economy (industry and construction accounted for 12% and the service sector for 69%). While this figure of 19% overall may not appear significant, it is important to note that in 2007, 2010 and 2013 the contribution of the agriculture sector to GDP exceeded 50%.

The industrial sector is still a developing sector in Paraguay. The sector has been experiencing growth of the order of 5% per year. This result was strongly influenced by the increase in the production of beef, dairy, sugar, beverages and tobacco, textiles and chemical products. However, as mentioned above, with increasing industrial activities there is a need for environmentally sound waste management, including a sustainable approach to recover and reuse recyclable/valuable materials, to reduce the use of hazardous materials and to dispose of hazardous materials in order to avoid environmental pollution.

#### **Baseline for POPs**

Based on the NIP update (2018) the lifecycle of PFOS-containing items in Paraguay includes imports, different uses, some recycling (but no separation of hazardous parts) and final disposal in landfills. The NIP update provides detailed information; however, it seems that the given estimates are too high compared to other countries, e.g China, which still produces PFOS and uses it for items.

During the PPG phase, an update of some PFOS inventories was carried out, including: (i) Firefighting foams, (ii) Aviation hydraulic fluids, (iii) Textiles and paper, and (iv) Leather Industry sector (R. Ramirez, January 2022).

Regarding firefighting foams, it was discovered that during the large fire that occurred in 2021 in the public company Petroleos Paraguayos (4-million-litre alcohol tank), all the existing firefighting foams stocks were used through the interinstitutional cooperation agreements that operate in these cases. Since the use of PFOS for the production of firefighting foam has ceased worldwide, it is assumed that no new stocks will be generated. Currently, new commercial firefighting foams may contain PFAO as well as PFOS but only as impurities.

The annual consumption of aviation hydraulic fluids was estimated at 30 tons, which corresponds to 30 kg of PFOS. The annual consumption of textiles and paper treated with PFOS was estimated at 745 tons, which represents 9,340 kg of PFOS. Finally, no use of PFOS was found in the tanning sector.

U-POPs (dioxins and furans) emissions in the country are mainly caused by the uncontrolled open burning of wastes. Another less relevant source is the incineration of medical waste in incinerators that do not have appropriate gaseous emission control systems. These sources of high emissions of u-POPs in the environment are a human health concern, especially for residents living close to dumping areas and treatment facilities. According to the NIP update (2018), the total dioxins and furans emissions for the year 2014 was 97.2 gTEQ. 40.6 gTEQ (41.8 %) are generated as a consequence of open burning of domestic waste and 2.4 gTEQ (2.5%) come from precarious medical waste incinerators.

## Baseline for greenhouse emissions from open burning of domestic waste

It is estimated that approximately 1,000,000 tons/year of domestic waste are open burned by the generators themselves or in uncontrolled dumpsites.

According to the data published in the report "THIRD BIENNIAL UPDATE REPORT ON CLIMATE CHANGE" corresponding to the year 2017, the incineration and burning of waste is responsible for the emission of 135,600 tons CO2 eq. in the year 2017.

#### Baseline for Hg

The Minamata Initial Assessment (MIA) carried out in Paraguay in 2017 shows that the two main sources of mercury emissions and releases correspond to open burning of domestic waste and mercury-added products. According to the partial update of the MIA developed during the PPG stage (M. Rodas, December 2021), open burning of domestic waste generates 7.14 ton Hg/year, while thermometers (both medical and industrial) and light sources represent 1.10 and 0.06 ton Hg/year, respectively.

Overall Ratings	FY24	FY23
Global Environmental Objectives (GEOs) / Development Objectives (DOs) Rating	Satisfactory (S)	N/A

The year 2024 is the first PIR carried out for the project.

The activities planned to achieve the global objectives are in progress. The indicators established in the CEO endorsement are monitored to evaluate progress.

Implementation Progress (IP) Rating	Moderately Satisfactory (MS)	N/A
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The year 2024 is the first PIR carried out for the project.

The start of the project had administrative delays. The change in Government had an impact on project implementation and led to the re-launching of the project under the new Government after its initial launching under the previous Government. However all activities planned for the reporting period have been initiated and are under development.

Overall Risk Rating Moderate Risk (M)
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The year 2024 is the first PIR carried out for the project.

The risk remains at Moderate, as stated in the CEO endorsement. The risk management plan and stakeholders are continuously monitored to detect any deviation from plan.

# II. Targeted results and progress to-date

Project Strategy	KPIs/Indicator	Baseline	Target level	Progress in FY24				
	Component 1 – Policy strengthening by integrating industrial waste management principles into the legislative framework targeting							
Outcome 1.1: Enha	anced policy and regul	atory framework to	include environment	ally sound management (ESM) for waste for municipalities.				
Output 1.1.1: Policy recommendation s drafted on ESM principles for industrial waste management, including import ban of POP- containing and mercury-added products, Extended Producer Responsibility- EPR, alternative product promotion and recyclability of valuable parts.	# of policy recommendations on ESM principles drafted.	Insufficient national and municipal policies recommendatio ns on ESM principles for industrial waste management, including import ban of POP- containing and mercury-added products, Extended Producer Responsibility- EPR, alternative product promotion and recyclability of valuable parts.	Policy recommendatio ns available to carry out ESM principles for solid and hazardous waste management.  # at least 1 draft of policy recommendatio ns.	Outcomes 1.1.1 and 1.1.2 have been addressed through the development of a term of reference that cover both the development of the necessary legal framework and the elaboration of guidelines for decision makers. The consultancy started in April 2024  To date there are products related to: a) analysis of the national and international legal framework, c) recommendations of the necessary national legal framework and c) draft national and municipal regulations for the management of waste containing POPs and mercury. These products have been validated by MADES and the last one involves dissimination to stakeholders to obtain feedback that is currently underway.  For the dissimination of the consultancy products, the Technical Advisory Committee (TAC) has been formed, which initially has 36 institutions from the public and private sectors and civil society organizations involved in the subject, and which will be constituted through a MADES resolution. Guests will be invited to these sessions according to the topics presented.				
Output 1.1.2: Guidelines for ESM and	# of guidelines for ESM and sustainable waste	Lack of national and municipal quidelines for	Guidelines for ESM and sustainable	Outcomes 1.1.1 and 1.1.2 have been addressed through the development of a term of reference that cover both the development of the necessary legal framework and the elaboration of guidelines for				

sustainable waste management targeting policy and decision makers drafted.	management drafted.	ESM and sustainable waste management targeting policy and decision makers.	waste management available to policy and decision makers.  # at least 1 draft of guidelines for ESM and sustainable waste management.	decision makers. The work has started.
Component 2 : Na peri-urban and rur		ing, knowledge ma	anagement and awa	areness-raising on industrial waste solutions aligning urban with
	ngthened capacity and PPs and mercury (Hg)-		lerate the adoption of	of ESM principles, BAT/BEP and financing options resulting in
Output 2.1.1: Updated inventory of POPs and Mercury, materials and waste-streams to identify opportunities for ESM and further Global Environmental Benefits.:	# of updated inventories of POPs/Hg, materials and waste-streams.  # of identified opportunities for ESM and further Global Environmental Benefits.	During the PPG an update of firefighting foams, aviation hydraulic fluids, textiles, paper and paperboard was carried out. It was also updating the main mercury figures, however, due to the complexity of PFOS and Hg-containing products and the widespread use of items across Paraguay, additional detailed mapping of waste streams is necessary during project initiation.	# 1 inventory for relevant PFOS,  1 U-POPs emissions from waste disposal practices and  1 inventory for Hg, including waste management and the identification of ESM opportunities.	Outcomes 2.1.1 and 2.1.2 have been addressed through the development of a term of reference that cover both aspects, the updating of national inventories on POPs and mercury, as well as the preparation of technical manuals and the implementation of training. The consultancy began in April 2024.  An inventory data registry has been developed.  Requests for information have been made to the institutions involved in the inventories, and follow-up is being carried out to obtain data.
Output 2.1.2: Technical manuals drafted for the ESM of waste in selected sectors, including EPR and BAT/BEP for sustainable and POPs and Hg- free waste management targeting practitioners and operators.	# of technical manuals for the ESM of waste, including EPR and BAT/BEP for sustainable and POPs and Hg-free waste management.	Lack of technical manuals adapted to the national situation and targeted to practitioners and operators on ESM of waste, including EPR and BAT/BEP for sustainable and POPs and Hgfree waste management.	Technical manuals for environmental sound and sustainable waste management, including EPR and BAT/BEP for sustainable and POPs and Hg-free waste management targeting practitioners and operators.  # 1 technical manual on management of solid and hazardous waste.  # 1 technical manual on sound management of articles containing POPs and Mercury throughout their	Outcomes 2.1.1 and 2.1.2 have been addressed through the development of a term of reference that covers both aspects, the updating of national inventories on POPs and mercury, as well as the preparation of technical manuals and the implementation of training. A manual on environmentally sound management of waste containing POPs and mercury and best available techniques and best environmental practices for operators has been developed. The manual for operators is in draft form and will be shared with stakeholders to obtain feedback.

			entire life cycle.	
Output 2.1.3: Improved knowledge management on POPs and Hg in waste streams, BAT/BEP and ESM options feeding and strengthening the national System of Environmental Information (SIAM) as a tool for assisting decision-making and knowledge management.	# of sections or sub-sections related with POPs and Hg in waste streams, BAT/BEP and ESM options included in the SIAM.  # of technical related documents included in the SIAM.	Insufficient national information systems available on POPs and Hg in waste streams, BAT/BEP and ESM options.	# At least two sections or subsections included in the SIAM: 1 related to POPs and 1 related to Hg in waste streams, BAT/BEP and ESM options.  # at least 12 technical related documents included in the SIAM.	The restructuring of the Environmental Information System (SIAM) website is under development, in conjunction with the MADES IT area, with the aim of making available and facilitating access to information related to waste and chemical management.  In a first stage, a repository of materials already prepared in previous consultancies for other projects related to waste and chemical management will be organized. In a second stage, the specific visualization related to the national inventories already carried out and those that will be updated is planned.  Link to draft version: http://test.mades.gov.py/siamtest/portal/convenios-internacionales
Output 2.1.4: Trainings for government officials at national and local levels, as well as private sector (especially waste collectors and recyclers), and media professionals on potential sustainable solutions for selected sectors to understand and tackle waste, POPs and Hg issues.	# of training participants/traine es at national/municipal levels (male/female).	Insufficient knowledge on waste and POPs and Hg management among officials and staffs at national and local levels, as well as private sector and media professionals.	# A training plan establishing the different target groups prepared and implemented. # At least 100 people relevant Stakeholders (60% male /40% female) trained.	No activities planned for the reporting period.
Output 2.1.5: Awareness- raising programs and customized events, especially for media, general public and specific target groups (i.e. children and women), on ESM and sustainability approaches for waste management.	# of awareness- raising programs and events for media, general public and specific groups.	An awareness raising activity on the specific topic was never conducted in the country.	# A communication plan prepared and implemented.  # At least 5000 people (60% male/40 % female) reached by awareness organized event /programs on waste and POPs and Hg management.	Terms of reference have been prepared and approved to address the different communication needs of the project, developing a single call for proposals jointly between the two executing entities, BCCC-SCRC and CEAMSO. The consultancy began at the end of May and is expected to be completed by May/2025.  To date, the project's Communication Plan product has been developed, which addresses key messages and communication milestones for the beginning, middle and end of the project.
sustainable waste	management.			P and final disposal of POPs and Hg-containing materials, for
Outcome 3.1: Redu	uction of POPs and Ho	through BAT/BEP	and ESM application	ns, including upgrading and/or upscaling of recycling infrastructures.
Output 3.1.1: Specific ESM plans for the pilot projects on POPs-reduction, recovery of valuable/recycla ble materials and final disposal of POPs and Hg- containing materials and wastes.	# of ESM plans for the pilot projects on POPs- reduction, recovery of valuable/recyclabl e materials and final disposal of POPs and Hg- containing materials and wastes.	During the PPG, a set of pilot projects on POPs and Hg reduction, recovery of valuable/ recyclable materials and final disposal of POPs and Hg containing materials and wastes, as well as on proper disposal of urban and	During project implementation detailed ESM plans and disposal strategies for each pilot project will be finalized to plan, select and execute national management plans for waste and POPs and Hg-containing items, including the identification	To date, the terms of reference for the listed pilots have been prepared and approved:  P1. Environmentally sound and sustainable management of lights and medical devices that contain mercury and its wastes: Evaluation of offers.  P2. Environmentally sound management of used hydraulic fluids containing PFOS: Planned for year 2.  P3. Adaptation and operation of uncontrolled dumpsites in small and medium-sized municipalities: Published.  P4. Household separation, collection and recovery of recyclable materials and special wastes: Published.  Each TOR details the inclusion of environmentally sound management plans for the reduction, recovery of recyclable materials and final disposal of materials and wastes containing POPs and Hg.

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		industrial waste, avoiding u- POPs emissions, were drafted.	of technically and economically feasible disposal alternatives. Once the BAT/BEP technologies are defined, a national elimination plan for each pilot will be developed to align potential synergies and ensure cost-effectiveness in line with Paraguay's commitment to fulfil the Stockholm Convention and Minamata Convention.  # one ESM plan and detailed project description developed and documented for each identified pilot project.	
Output 3.1.2: Tools for promotion of business and financing options for ESM activities, including a support to the establishment of a business incubator to help relevant startups succeed, and identifying potential Public- Private Partnerships.	# of tools for promotion of business and financing options for ESM activities.	There are initiatives in the country regarding the promotion of small and medium-sized industries and support for new entrepreneurs, however, there are no specific lines or related experiences for the specific ESM activities for POPs and Hg containing fractions.	# of new or adapted tools for promotion of business and financing options for ESM activities.  # people (60% male /40% female) trained.  # of new/formalized business units.	Two instances of learning exchange were managed between UNIDO, MADES, CEAMSO, the Project's PMU and experts from the Project executed in Paraguay "UNIDO/European Union - MiPyme Compete", which includes work in circular business incubation.  Together with CEAMSO, the lessons learned in each project activity were reviewed to include these aspects in the terms of reference, which are currently being reviewed and adjusted for launching in July/2024.
Output 3.1.3: Pilot projects implemented for ESM of valuable/recycla ble fractions (e.g, source separation, collection and transport, pre- processing, recycling or re- use) of selected fractions as well as for the proper disposal of urban and industrial waste, avoiding u-POPs emissions.	# of pilot projects implemented.	During the PPG, four pilot projects on POPs and Hg reduction, recovery of valuable/ recyclable materials and final disposal of POPs and Hg containing materials and wastes, as well as on proper disposal of urban and industrial waste, avoiding u-POPs emissions, were drafted.	# All pilot projects fully and successfully executed.	For the reporting period, the progress for each pilot is detailed below: P1. Environmentally sound and sustainable management of lights and medical devices that contain mercury and its wastes: A note of commitment and adhesion to the project has been obtained from the Ministry of Health. In conjunction with the Ministry's Environmental Health Directorate, 5 public hospitals have been selected as part of the pilot project: The regional hospital of Ciudad del Este, of Encarnacion, of Coronel Oviedo, of Villarrica and the Children's Pediatric Hospital of Acosta Ñu. Official notes have been managed to the hospitals for the designation of a regular and alternate focal point to carry out the planned work. In addition, TORs have been approved by the by counterparts, ANDE, DIGESA, MADES, and BCCC-SCRC/LATU, call for bids published and closed, in process of bid evaluation. Work is expected to begin in August/2024. The first stage, which is currently underway, involves the evaluation of technological alternatives, the design of the management model and the development of the protocols to be implemented (the first stage correspond to the TORs mentioned above). In the next stage, the terms of reference for the acquisition of the selected technologies and the implementation of the management system will be proposed.  Besides, internal consultation has been arranged with the Strategic Planning Directorate and the Legal Advisory Directorate of MADES to evaluate the work mechanism to be implemented with the private sector, which will be given the operation of the equipment to be acquired under the Project, considering that there is no previous experience in public-private partnerships with the MADES.

Output 3.1.4: # Quan Final BAT/BEP disposal of POPs and mercury containing fractions. # Quan materials (tons).	entally containing fractions are not properly classified or managed and are disposed of in an antity of containing fractions are not properly classified or managed and are disposed of in an antity of unsustainable	The project will ensure the environmentally sound disposal of a minimum of POPs and Hg containing fractions, as outlined in the GEB sections.  Priority will be given to the use of previously upgraded existing national facilities for the environmentally sound conditioning, treatment and final disposal of POPs and Hg containing fractions.  The project will also ensure that a maximum of indirect GEB will be achieved simultaneously.	P2. Environmentally sound management of used hydraulic fluids containing PFOS: Activities planned for the first quarter of the second year.  P3. Adaptation and operation of uncontrolled dumpsites in small and medium-sized municipalities: Together with MADES, 10 municipalities have been evaluated and selected to be part of the pilot project. Two are distributed in the center of the country, La Colmena and Tebicuary, 3 in the east, Yguazu, Naranjal and Tawapy, and 5 in the south of the country, Fram, Carmen del Paraná, Honehau, Bella Vista and Obligado. In addition, the notes of commitment and adhesion to the project, as well as the municipal counterparts, have been managed. Likewise, ToR approved by counterparts: 10 beneficiary municipalities, MADES and BCCC-SCRC/LATU. Call published with closing date July/2024.  P4. Household separation, collection and recovery of recyclable materials and special wastes: A note of adhesion to the project and counterpart of the Municipality of Luque, identified in the CEO document, has been managed. ToR approved by counterparts: Municipality of Luque, MADES and BCCC-SCRC. Call published with a closing date of July/2024. In addition, in this pilot, the ToR for the *Consultancy to carry out the urban solid waste characterization study for the municipality of Luque* was prepared and approved, which will be developed in parallel to the pilot consultancy. It is expected to be published in July/2025.  For each pilot developed, the terms of reference have been reviewed by the technical and planning departments of MADES, the Executing Entity in charge of the activity and the counterpart established in the annual operative plan (AOP), with records of the review and final approval process. Likewise, for each call for proposals, MADES, BCCC-SCRC and CEAMSO whee infully prepared a list of professionals and companies, both national and international, to whom the invitation to tender has been sent by e-mail, ensuring timely dissemination. Spreading has been done through MADES, BCCC-SCRC and E
Component 4: Project Monito	oring and Evaluation.		
Outcome 4.1: Monitoring			
Output 4.1.1: Evaluation according system set and monitoring	to the	According to M&E plan.  According to the	On November 14th, the project (re)launching event was held for the new central government authorities at the Hotel Esplendor in the city of Asunción. Invitations to the event were sent to key project

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operational.	# monitoring of socio-economic benefits  # monitoring gender dimensions  # monitoring of SEP.  # monitoring of ESMP.		ESMP, Gender Action Plan and Stakeholder Engagement Plan.	stakeholders and members of the steering committee through invitation notes issued by the Ministry of Environment. A total of 27 notes were sent. A total of 45 people were present, 27 women and 18 men. Participants came from the central public sector, municipalities, private sector and academia.  Considering the change of Government, new appointments were made for the members of the Project Steering committee (PSC). Following the event, the first meeting of the PSC was held at the Hotel Esplendor with the new titular and alternate focal points. Representatives of all the institutions present were present, totalling 12 participants, 8 women and 4 men.  Also, for the dissemination of the consultancy products, the Technical Advisory Committee has been formed, which initially has 36 institutions from the public and private sectors and civil society organizations involved in the subject, and which will be constituted through a MADES resolution. The designation of representatives for TAC is made up of 36% women and 64% men. Additionally, guests will be invited to these sessions according to the topics presented. The first meeting of the CTA is scheduled for July 2024.  The draft operational manual for the project was presented at the PSC meeting, and some adjustments were made and the document was approved.  As a complement to the CEO Endorsement document, the project management plan was developed. This plan is for internal use of the PMU and defines and establishes the way in which the project is executed, monitored, controlled and closed. Model records and templates to be used for project monitoring were also generated. The Plan was reviewed jointly with MADES and LATU-BCCC/SCRC and has their approval.  The Project Management Plan  Cost Management Plan  Cost Management Plan  Cost Management Plan  Cost Management Plan  Risk Management Plan  Communications Management Plan  Monitoring and Control Plan  A detailed instruction of unified procedures to be implemented for each process executed within the framework of the
Outcome 4.2: Evalu	uation			
Output 4.2.1: Mid-term and final external evaluations conducted.	# 1 mid-term report. # 1 final evaluation report.	N/A	# 1 mid-term report. # 1 final evaluation report.	No activities planned for the reporting period.
Output 4.2.2: Lessons learned shared with all relevant stakeholders for future application, development and improvement.	# lessons learned summarized as document.	N/A	# 1 lessons learned document summarizing lessons learned at national and local level. # 1 terminal project workshop.	No activities planned for the reporting period.

# III. Project Risk Management

	(i) Risks at CEO stage	(i) Risk level FY 23 At CEO stage	(i) Risk level FY 24	(i) Mitigation measures	(ii) Progress to-date	New defined risk <sup>3</sup>
1	Government change and the new government has less interest in ESM issues.	М	М	The project intends to address this risk by establishing a strong supervisory mechanism, e.g. the project technical committee will be drawn from a wide variety of national stakeholders.	In August 2023, the new authorities took office after the elections, where 2 (Ministry of the Environment and Ministry of Health) of the 3 national counterparts changed their ministers (the national electricity administration maintained its President but its directors changed). Meetings were held with the 3 state counterparts to present the Project. There is a note of adhesion and commitment to the project from the Ministry of Health and ANDE. Meetings were also managed and notes of adherence and commitment to the project were obtained for the 11 municipalities part of the project. In 2026 municipal elections will be held and the notes will be updated.	
2	Difficulties in enhancing the regulatory system within the project timeframe.	L	M	The Government of Paraguay has ratified several MEAs including the BRS and Minamata Convention, by developing its NIP and by formally applying for this project has already established strong pillars towards the sound management of chemicals and waste. In this project, relevant contact persons at the Ministry will be engaged as early as possible. Specific awareness-raising events will be organized and targeted at them. The project will include the review of the legal framework to enable the inclusion of ESM aspects into existing legislation, regulations, etc. This is usually more efficient and results in a faster endorsement process compared to the drafting and adoption of new regulations.	The project is working on improving the national legal framework and has identified the need for high-level legal regulations (laws and decrees) that require legislative approval. The development of the regulations will be carried out according to plan, but approval by the legislature could take time.  To position the study and approval of the new regulations by the legislature, a plan has been initiated to involve stakeholders in public policies and to make the issue gain strength at both the citizen and political levels.  The plan's actions are focused on informing, motivating and, above all, engaging stakeholders to become referents of change in their sectors, positioning the key issues and exerting citizen pressure to raise the discussion to the political-legislative level.  The identification of actors was carried out, both citizen organizations and interested NGOs, to act as collaborators. In a next stage and for the implementation of the activities, it is proposed to work with key messages, specific communication instances and strategic actions for citizen mobilization, through the use of digital media, the organization of awareness-raising and training activities and the creation of collaborative networks.	
3	Project resources are not sufficient to ensure the necessary interventions to achieve sustainability of ESM activities.	L	L	The project will allocate enough grants to implement sustainable BAT/BEP pilots, however, most important is to secure private sector cooperation and co-financing for ownership and commitment.	The project's Technical Advisory Committee has been formed, which includes the participation of the private sector, with the designation of representatives of the cofinancing parties to monitor the development of the activities.	
4	Paraguay is susceptible to three potential risks: a) floods, b) droughts and e) fires, which depend on weather conditions.  Climate Change Risks might include unexpected weather events that disrupt the project process on sites, causing further	L	L	In relation to flood risks, site selection criteria will be applied for new facilities, avoiding areas susceptible to flooding or the application of containment measures and the preparation of contingency plans in the case of existing facilities.  With regard to the risk of fire, in the case of new installations, preventive measures will be incorporated in the design phase, mainly with regard to infrastructure requirements and practices associated with the management of flammable materials, in strict compliance with	With regard to flood risks, an initial survey was conducted of the municipalities and facilities that are candidates to benefit from the pilot projects. Compliance with the national regulations of the Ministry of the Environment was verified, based on environmental impact studies, related to the location of final disposal sites and waste treatment facilities. Based on these points, 11 municipalities have been selected that meet the criteria for selecting sites for this type of project.	

 $<sup>^{3}\ \</sup>mathrm{New}$  risk added in reporting period. Check only if applicable.

					Т	
	contamination.			the regulatory framework. For existing facilities, a risk assessment will be carried out identifying the necessary corrective measures to minimize the risks. In all cases, preventive control mechanisms will be implemented and contingency plans will be developed.  Climate Change may increase the identified potential risks of unexpected weather extremes such as heavy rainfall or heat waves. These extremes were assessed as part of the ESMP and risk reduction measures were defined accordingly.	reference for the pilots include the development of an environmentally sound management plan for each pilot, which includes compliance with national regulations on fire protection and firefighting, a maintenance plan for the facilities, an emergency, contingency and first aid protocol, and an occupational risk management protocol.	
5	Technical expertise is not readily available due to the pandemic.	М	L	The project should identify alternate technical expertise in case it is required. Planning should be flexible enough to reschedule activities onsite that require specific expertise. This is particularly important if government experts are not available due to emergencies.	National experts have been identified in conjunction with MADES and a list of professionals by subject area has been drawn up. This is used to send out invitations to tender. Likewise, through each public tender, the list of professionals is regularly updated, which will allow the project to search for experts by area if necessary.	
6	Possible re-instatement of COVID-19 containment measures limits available capacity or effectiveness of project execution/implementati on	М	L	The Government of Paraguay dictates/updates COVID-19 containment measures. The project must be ready to strengthen the capacity of the stakeholders for remote work and online interactions by securing access to commercially available conferencing systems.	After the COVID-19 pandemic, there are lessons learned at the national level to continue work activities uninterrupted. In addition, a budget analysis has been carried out at the beginning of the project, which is updated monthly, identifying possible budget lines with greater availability for institutional strengthening.	
7	Some project supporters, co-financiers or beneficiaries may not be able to continue with project execution/implementation.	L	L	The project will have to monitor closely the situation of these counterparts in order to find alternate supporters or co-financiers, or to readjust the list of beneficiaries.	For the project beneficiaries, in addition to the selected municipalities, there are back-up municipalities that have already been identified and have a baseline diagnosis. For private sector co-financiers, there will be constant follow-up through the identification and classification of stakeholders at the beginning of the project.	
8	Project staff and stakeholders are not able to engage and interact effectively due to the pandemic.	L	L	The project will have to monitor closely the situation of its staff and stakeholders to strengthen their capacity for remote work and online interactions by securing access to commercially available conferencing systems and alternate interaction arrangements; e.g. reduced-size meetings in open spaces.	After the COVID-19 pandemic, there are lessons learned at the national level to continue work activities uninterrupted. In addition, a budget analysis has been carried out at the beginning of the project, which is updated monthly, identifying possible budget lines with greater availability for institutional strengthening.	
9	Price increases for procurement of goods/services.	M	М	The project team will have to work harder in finding alternate providers and making sure that competitive pricing is obtained	A procedural manual has been prepared for processes developed within the framework of the project, taking into account the manuals and guidelines of each executing agency. For procurement, the process of asking bidders for a round of price improvement for evaluated bids has been included.	

**2.** If the project received a <u>sub-optimal risk rating (H, S)</u> in the previous reporting period, please state the <u>actions taken</u> since then to mitigate the relevant risks and improve the related risk rating. Please also elaborate on reasons that may have impeded any of the sub-optimal risk ratings from improving in the current reporting cycle; please indicate actions planned for the next reporting cycle to remediate this.

N/A		

3. Please clarify if the project is facing delays and is expected to request an extension.

The project started activities in the second quarter of 2023, with the first meeting of the Project Steering Committee and presentation to national counterparts at the initial launching event under the previous Government. The contracts between the Implementing Agency (UNIDO) and the Executing Entities (LATU and CEAMSO) were signed in May 2023, and the first disbursements made in September 2023. The first recruitment of the project management unit initiated in July 2023 was completed in December 2023 due to the change of central government authorities in August 2023.

Although there have been delays in the start of the project, measure are taken to accelerate implementation and meet the initially set completion date.

4.	Please	provide	the main	findings	and	recommend	lations of	completed	$\mathbf{MTR},$	and	elaborate	on	any
ac	tions tak	en towa	rds the red	commenda	ations	s included in t	he report.						

N/A		

## IV. Environmental and Social Safeguards (ESS)

<b>1.</b> As p	art of the req	juireme	nts for p	projects froi	m GEF-6	onw	/ards,	and b	ased or	n the	scree	ning a	s pe	r the
<b>UNIDO</b>	Environmen	tal and	Social	Safeguards	<b>Policies</b>	and	Proce	dures	(ESSP	P), w	/hich	catego	ry is	s the
project?	?			_								_	-	

П	Category	/ A	nro	iect
_	Category	, ,	$\mathbf{p}_{\mathbf{i}}\mathbf{q}_{\mathbf{i}}$	<b>IOUL</b>

□ Category B project

□ Category C project

(By selecting Category C, I confirm that the E&S risks of the project have not escalated to Category A or B).

#### Notes on new risks:

- If new risks have been identified during implementation due to changes in, i.e. project design or context, these should also be listed in (ii) below.
- If these new/additional risks are related to Operational Safeguards # 2, 3, 5, 6, or 8, please consult with UNIDO GEF Coordination to discuss next steps.
- Please refer to the UNIDO <u>Environmental and Social Safeguards Policies and Procedures</u> (ESSPP) on how to report on E&S issues.

Please expand the table as needed.

	E&S risk	Mitigation measures undertaken during the reporting period	Monitoring methods and procedures used in the reporting period
(i) Risks identified in ESMP at time of CEO Endorsement	Workers' safety during pilot project execution.	Ventilations and other occupational and health systems.  Provision of work clothes and personal protective equipment (PPE): goggles, gloves, respiratory masks and protective suits during any potential contact with PFOS and Hg during storage and treatment.  Occupational Risk Management in work areas.  Storage of toxic and hazardous substances and waste under BAT and BEP to avoid any harm to workers  Selection of technology and operating conditions according BAT and BEP.	The development of all risk mitigation plans listed in the ESMP were included in the preparation of the pilots' terms of reference.

	I		
		Implementation of an emergency and first aid plan.  Employees training to create awareness of the hazards involved (POPs, Mercury and waste as appropriate).	
	Presence of child labour in waste sector.	Monitor and ensure that children are not involved in waste management activities in selected sites	The development of all risk mitigation plans listed in the ESMP were included in the preparation of the pilots' terms of reference.
	Displacement of women as a consequence of the design of processes and infrastructure.	When the design of processes and infrastructure is required, ensure representative participation of women in order to ensure adaptation to their configuration and physical condition.	The terms of reference included the aspects of dissemination and validation of the management proposals for the pilots with the national counterpart. Throughout the consultancy, aspects related to the promotion of women's participation and the identification of requirements are considered.
	Spread of COVID- 19 among project beneficiaries/team	Implementation of the national COVID19 biosafety protocols.  Promote control of COVID19 vaccination cards.	NA
	Pilots project affect health of workers and surrounding communities (pollutant emissions, noise emissions, handling of hazardous substances and waste).	Provision of appropriate measures to avoid negative impacts on the health of workers/communities: avoid noise, dust and generation; avoid smoke, vapours and other gaseous pollutants; ensure chemicals and waste are managed in an environmentally sound manner.  Selection of technology and operating conditions according BAT and BEP to reduce any negative impact on the environment and comply with the current environmental legislation.	The development of all risk mitigation plans listed in the ESMP were included in the preparation of the pilots' terms of reference.
(ii) New risks identified during project implementation (if not applicable, please insert 'NA' in each box)	NA	NA	NA

## V. Stakeholder Engagement

1. Using the previous reporting period as a basis, please provide information on **progress, challenges and outcomes** regarding engagement of stakeholders in the project (based on the Stakeholder Engagement Plan or equivalent document submitted at CEO Endorsement/Approval).

## **Progress and outcomes**

- <u>Project launch:</u> In November 2023, the Project was launched with the participation of the national counterparts of the project, as well as institutions, civil society organizations and academia. Subsequently, a meeting of the Project Steering Committee was held to present an accountability report to date and next actions, present and approve the Operational Plan 2023-2024 and the Project's Operational Manual.
- <u>National counterparts:</u> Meetings were held with several of the country's municipalities to present the project and evaluate the selection of the 11 municipalities to be benefited, based on pre-established criteria. Likewise, 5 public hospitals were selected as beneficiaries of one of the pilot projects. Once selected, 11 new notes of

- adhesion and commitment to participate in the project were managed by municipalities, 1 of de Ministry of public health and 5 of the hospitals.
- <u>Technical Advisory Committee (CTA):</u> The CTA was formed, initially with 36 institutions from the public and private sectors and civil society organizations, to provide advice and support for the project's activities. The draft MADES resolution approving the Technical Committee and establishing its operating rules is in the process of being reviewed and approved.
- <u>Grievance mechanism:</u> A grievance mechanism was developed based on the proposal established in the CEO endorsement document, which was reviewed and approved by MADES and the BCCC-SCRC/LATU. MADES and PMU project staff are familiar with its application.
- <u>Monitoring:</u> A master spreadsheet of indicators and plans was developed for recording and monitoring, which is reviewed and updated at the end of each month to update the values obtained.

#### **Challenges**

- Although, in 2026 there will be a change in the municipal authorities and this may have an impact on the development of the activities. The project has taken this aspect into account by requesting institutional notes of adhesion and commitment to the project until its completion in 2027. Likewise, the work carried out to date has been at both the political and technical levels, so the latter would facilitate and promote the continuity of the work.
- Also, from a legal point of view, municipalities have the obligation and responsibility for the operational management of waste in their territory, so this project activities will help authorities to manage waste in an integrated manner and demonstrate a commitment to the environment and citizens.
- **2.** Please provide any feedback submitted by national counterparts, GEF OFP, co-financiers, and other partners/stakeholders of the project (e.g. private sector, CSOs, NGOs, etc.).

N/A

3. Please provide any relevant stakeholder consultation documents.

#### Attachments:

10682\_PSC minutes and agenda

10682\_Counterparts notes

10682 Cournterparts minutes

10682\_CTA draft resolution

10682\_Project brochure

#### VI. Gender Mainstreaming

- 1. Using the previous reporting period as a basis, please report on the **progress** achieved **on implementing gender-responsive measures** and **using gender-sensitive indicators**, as documented at CEO Endorsement/Approval (in the project results framework, gender action plan or equivalent).
  - The project management unit is made up of 100% women. Promoting the training and participation of women in the waste and chemicals sector.
  - The terms of reference of the invitations to bid included a gender perspective and the promotion of women's participation during the invitations to bid and during the bid evaluations. Specifically for the pilots, information on the economic impact of waste management on women and social costs and health risks related to waste management it was requested.
  - For all events and meetings held, an attendance record sheet disaggregated by gender and age range is used.
  - A master spreadsheet of indicators and plans was developed for recording and monitoring purposes, with data disaggregated by gender, which is reviewed and updated at the end of each month to update the values obtained.

#### VII. Knowledge Management and Communication

**1.** Using the previous reporting period as a basis, please elaborate on any **knowledge management and communication activities / products**, as documented at CEO Endorsement / Approval.

In a first stage, we work with the MADES IT team, in the restructuring of the MADES SIAM website to facilitate the availability of information on chemicals and waste, collecting and organizing all the national information available on projects already executed and in execution, organizing the information based on the Minamata, Stockholm, Rotterdam and Basel Conventions. Website under construction: http://test.mades.gov.py/siam-test/portal/convenios-internacionales

In a second stage, we will work on providing information on the data and results of the national inventories previously carried out and those that will be updated, extracting the data from the national reports and presenting them in graphic and table formats to facilitate their visualization.

**2.** Please list any relevant knowledge management and communication mechanisms / tools that the project has generated.

#### **Attachments:**

10682\_Project brochure

#### Websites:

Project page hosted on MADES's website:

https://www.mades.gov.py/proyectos/soluciones-libres-de-mercurio-y-cop-para-la-gestion-ambientalmente-racional-de-desechos-en-paraguay/

Page under construction hosted on SIAM/MADES's website:

http://test.mades.gov.py/siam-test/portal/convenios-internacionales

#### **Publications**

Project's launch:

https://www.mades.gov.py/2023/11/14/lanzamiento-del-proyecto-soluciones-libres-de-mercurio-y-cop-para-la-gestion-ambientalmente-racional-de-desechos-en-paraguay/

https://www.facebook.com/mambientepy/videos/320012180742447?locale=es\_LA

https://x.com/UNIDO/status/1724774856225444278?s=20https%3A%2F%2Fwww.facebook.com%2Fphoto%2F%3Ffbid%3D655544720083319&set=a.230718152565980

https://ccbasilea-crestocolmo.org.uy/lanzamiento-de-proyecto-soluciones-libres-de-mercurio-y-cop-para-la-gestion-ambientalmente-racional-de-los-desechos-en-paraguay/

#### VIII. Implementation progress

1. Using the previous reporting period as a basis, please provide information on **progress, challenges and outcomes achieved/observed** with regards to project implementation.

Component 1: Policy strengthening by integrating industrial waste management principles into the legislative framework targeting municipalities.

Outcomes: Identification of the necessary legal framework to be developed to improve the environmentally sound management of wastes and products containing POPs and mercury.

Challenges: Current national and municipal policies and regulations are not formulated in relation to the environmentally sound management of POPs and Hg-containing wastes, so they need to be adjusted. Some proposed regulations require legislative approval, which requires political support for their enactment.

Component 2: National capacity building, knowledge management and awareness-raising on industrial waste solutions aligning urban with peri-urban and rural areas.

Outcomes: Implementation of consulting to update inventories, preparation of technical manuals and implementation of training. The actors who will provide information for the inventories have been identified, and it is proposed to have the

support of a draft MADES resolution for the formation of the Technical Advisory Committee, to facilitate and promote access to information.

Challenges: Limited access to key information for inventory updates and compliance with required levels, especially in relation to private institutions. To achieve the use of the manuals being prepared for operators and professionals on the environmentally sound management of waste and products containing POPs and Hg.

Component 3: Pilot projects, including public-private partnerships, BAT/BEP and final disposal of POPs and Hg-containing materials, for sustainable waste management.

Outcomes: The 11 municipalities and 5 publics hospitals for the implementation of the pilots have been identified and defined with a letter of adhesion and support to the project. All calls for tender for the pilots have been executed.

Challenges: To implement pilot projects focused on the adequate management of a specific waste stream, waste with POP and Hg content, considering the needs and shortcomings in municipal management of urban waste.

Establish the first example of public-private alliance for the management of hazardous waste in Paraguay.

#### Component 4: Project Monitoring and Evaluation.

Outcomes: Updated members of the Project Steering Committee and Technical Advisory Committee have been appointed. Several operational tools have been developed to guide the implementation and continuous monitoring of the project, such as: project management plan, master monitoring spreadsheet for indicators and plans, operational manual and instructions for processes developed within the framework of the project with the executing entities.

Challenges: Detailed and accurate monitoring of the indicators listed in the CEO Endorsement document and the ONUDI IRPFs, considering the number of indicators (70), their definitions and reporting periods.

**2.** Please briefly elaborate on any **minor amendments**<sup>4</sup> to the approved project that may have been introduced during the implementation period or indicate as not applicable (NA).

Please tick each category for which a change has occurred and provide a description of the change in the related textbox. You may attach supporting documentation, as appropriate.

Results Framework	NA
Components and Cost	NA
Institutional and Implementation Arrangements	NA
Financial Management	NA
Implementation Schedule	NA
Executing Entity	NA
Executing Entity Category	NA
Minor Project Objective Change	NA
Safeguards	NA
Risk Analysis	NA
Increase of GEF Project Financing Up to 5%	NA
Co-Financing	N/A
Location of Project Activities	NA
Others	NA

<sup>&</sup>lt;sup>4</sup> As described in Annex 9 of the *GEF Project and Program Cycle Policy Guidelines*, **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%.

3. Please provide progress related to the financial implementation of the project.

The main expenditures during the reporting period reached an amount of USD 843,748.00 in relation to the disbursements to the project executing entity.

The total amount of co-financing according to CEO Endorsement document is: USD 70,098,373. Disaggregated:

- MADES USD 727,235

- ANDE USD 13,136,400

- Compasa USD 9,765,714

- Coresa USD 20,700,992

- Brassur USD 25,004,610

- Tajy Ambiental USD 550,000

- UNIDO USD 82,000

- Municipality of Tebicuary USD 131,422

As for the new municipal counterpart, the total amount of new co-financing is: USD 7,071,583.24 (exchange rate: 1USD:7300GS)

Total co-financing: USD 77,169,956.24

It is planned to report the status of co-financing at the end of each calendar year. Therefore, the first report will be included in the next PIR.

## IX. Work Plan and Budget

1. Please provide **an updated project work plan and budget** for <u>the remaining duration of the project</u>, as per last approved project extension. Please expand/modify the table as needed.

Outputs by Project Component		Year 1 2023			Year 2 2024			Year 3 2025			Year 4 2026			Year 5 2027				GEF Grant Budget			
Outputs by Project Component	Q1	Q2	QЗ	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Available (US\$)
Component 2 : National capacity building, knowledg	je man	ageme	nt and :	awaren	ess-rai	sing o	n indus	trial wa	ste soli	utions a	aligning	g urban	with p	eri-urba	n and	rural are	eas.				
Outcome 2.1: Strengthened capacity and awareness to a	ccelera	te the a	doption	ofESM	princip	les, BA	T/BEP a	and finar	ncing op	tions re	sulting i	n sustai	nable a	nd POP	's and m	nercury (l	Hg)-free	opera	ions.		
Output 2.1.1: Updated inventory of POPs and Mercury, materials and waste-streams to identify opportunities for ESM and further Global Environmental Benefits.:																					26.635,00
Output 2.1.2: Technical manuals drafted for the ESM of waste in selected sectors, including EPR and BAT/BEP for sustainable and POPs and Hg-free waste management targeting practitioners and operators.																					38.200,00
Output 2.1.4: Trainings for government officials at national and local levels, as well as private sector (especially waste collectors and recyclers), and media professionals on potential sustainable solutions for selected sectors to understand and tackle waste, POPs and Hg issues.																					113.214,00
Output 2.1.3: Improved knowledge management on POPs and Hg in waste streams, BAT/BEP and ESM options feeding and strengthening the national System of Environmental Information (SIAM) as a tool for assisting decision-making and knowledge management.																					3.600,00
CUDUL 2.1.5. Awareness-ransing programs and customized everts, especially for media, general public and specific target groups (i.e. children and women), on ESM and sustainability approaches for waste management.																					142.086,98

Outputs by Project Component		Yea 20	ar 1 23				ar 2 024				ar3 025				ar 4 126		Year 5 2027			GEF Grant Budget	
Outputs by Project Component	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Available (US\$)
Component 3: Pilot projects, including public-privat	te partr	ership	s, BAT/	BEP ar	nd final	dispos	al of P	OPs an	d Hg-co	ntaini	ng mate	rials, fo	or susta	inable	waste	manage	ement.				
Outcome 3.1: Reduction of POPs and Hg through BAT/B	EP and	ESM ap	plicatio	ns, inclu	uding up	gradin	g and/or	rupscali	ng of re	cycling	infrastru	ctures.									
Output 3.1.1: Specific ESM plans for the pilot projects on POPs-reduction, recovery of valuable/recyclable materials and final disposal of POPs and Hg-containing materials and wastes.																					
Output 3.1.2: Tools for promotion of business and financing options for ESM activities, including a support to the establishment of a business incubator to help relevant startups succeed, and identifying potential Public-Private Partnerships.																					70.706,0
Output 3.1.3: Pilot projects implemented for ESM of valuable/recyclable fractions (e.g., source separation, collection and transport, pre-processing, recycling or re- use) of selected fractions as well as for the proper disposal of urban and industrial waste, avoiding u-POPs emissions																					2.441.282,7
Output 3.1.4: Final BAT/BEP disposal of POPs and mercury containing fractions.																					113.214,0
moreary containing rections.		Yea	ar 1				ar 2 024		Year 3 2025				Year 4 2026				Year 5 2027				GEF Grant Budget
Outputs by Project Component	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Available (US\$)
Component 4: Project Monitoring and Evaluation.									•											<u> </u>	
Outcome 4.1: Moritoring																					
Output 4.1.1: Monitoring system set and operational.																					
Outcome 4.2: Evaluation																					•
Output 4.2.1: Mid-term and final external evaluations conducted.																					120.000,0
Output 4.2.2: Lessons learned shared with all relevant stakeholders for future application, development and mprovement.																					13.500,0
																					3.197.511,70
*Note: Consider that USD551,835.40 is ava 3,897,319.56	ilable	for op	eratir	ng exp	enses	and l	JSD14	17,972	.46 fo	adm	inistra	ative e	xpens	es. Ha	ving a	total	availa	ble o	f UDS		

Reference: 10682\_Work plan and budget, submitted as an annex

# X. Synergies

## 1. **Synergies** achieved:

Two instances of learning exchange were managed between UNIDO, MADES, CEAMSO, the Project's PMU and experts from the Project executed in Paraguay "UNIDO/European Union - MiPyme Compete", which includes work in circular business incubation.

Together with CEAMSO, the lessons learned in each project activity were reviewed to include these aspects in the terms of reference, which are currently being reviewed and adjusted for launching in July/2024.

## 3. Stories to be shared (Optional)

	N/A			
ı				

#### **XI. 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 <a href="OpenStreetMap">OpenStreetMap</a> or <a href="GeoNames">GeoNames</a> use this format. Consider using a conversion tool as needed, such as: <a href="https://coordinates-converter.com">https://coordinates-converter.com</a> Please see the Geocoding User Guide by clicking <a href="https://coordinates-converter.com">https://coordinates-converter.com</a> Please

Location Name	Latitude	Longitude	Geo Name ID	Location and Activity Description
Asuncion, Paraguay	-25.28646	-57.647	3439389	

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

#### **EXPLANATORY NOTE**

- 1. **Timing & duration:** Each report covers a twelve-month period, i.e. 1 July 2023 30 June 2024.
- 2. **Responsibility:** The responsibility for preparing the report lies with the project manager in consultation with the Division Chief and Director.
- 3. **Evaluation:** For the report to be used effectively as a tool for annual self-evaluation, project counterparts need to be fully involved. The (main) counterpart can provide any additional information considered essential, including a simple rating of project progress.
- 4. **Results-based management**: The annual project/programme progress reports are required by the RBM programme component focal points to obtain information on outcomes observed.

Global Environmental Objectives (GEOs) / Development Objectives (DOs) ratings		
Highly Satisfactory (HS)	Project is expected to achieve or exceed <u>all</u> its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as "good practice".	
Satisfactory (S)	Project is expected to <u>achieve most</u> of its <u>major</u> global environmental objectives, and yields satisfactory global environmental benefits, with only minor shortcomings.	
Moderately Satisfactory (MS)	Project is expected to <u>achieve most</u> of its major <u>relevant</u> objectives but with either significant shortcomings or modes overall relevance. Project is expected not to achieve some of its major global environmental objectives or yield some of the expected global environmental benefits.	
Moderately Unsatisfactory (MU)	Project is expected to achieve <u>some</u> of its major global environmental objectives with major shortcomings or is expected to <u>achieve only some</u> of its major global environmental objectives.	
Unsatisfactory (U)	Project is expected <u>not</u> to achieve <u>most</u> of its major global environmental objectives or to yield any satisfactory global environmental benefits.	
Highly Unsatisfactory (HU)	The project has failed to achieve, and is not expected to achieve, <u>any</u> of its major global environmental objectives with no worthwhile benefits.	

Implementation Progress (IP)		
Highly Satisfactory (HS)	Implementation of <u>all</u> components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be presented as "good practice".	
Satisfactory (S)	Implementation of most components is in substantial compliance with the original/formally revised plan except for only few that are subject to remedial action.	
Moderately Satisfactory (MS)	Implementation of <u>some</u> components is in substantial compliance with the original/formally revised plan with some components requiring remedial action.	
Moderately Unsatisfactory (MU)	Implementation of <u>some</u> components is <u>not</u> in substantial compliance with the original/formally revised plan with most components requiring remedial action.	
Unsatisfactory (U)	Implementation of most components in not in substantial compliance with the original/formally revised plan.	
Highly Unsatisfactory (HU)	Implementation of <u>none</u> of the components is in substantial compliance with the original/formally revised plan.	

## **Risk ratings**

Risk ratings will access the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risk of projects should be rated on the following scale:

High Risk (H)	There is a probability of greater than <b>75%</b> that assumptions may fail to hold or materialize, and/or the project may face high risks.	
Substantial Risk (S)	There is a probability of between <b>51%</b> and <b>75%</b> that assumptions may fail to hold or materialize, and/or the project may face substantial risks.	
Moderate Risk (M)	There is a probability of between <b>26%</b> and <b>50%</b> that assumptions may fail to hold or materialize, and/o the project may face only moderate risk.	
Low Risk (L)	There is a probability of up to <b>25%</b> that assumptions may fail to hold or materialize, and/or the project may face only low risks.	