



Project Implementation Report

(1 July 2022 – 30 June 2023)

Project Title:	Environmentally sound management and disposal of PCBs wastes and PCB contaminated equipment in Sri Lanka
GEF ID:	5314
UNIDO ID:	150050
GEF Replenishment Cycle:	GEF-5
Country(ies):	Sri Lanka
Region:	SA - Southeast Asia
GEF Focal Area:	Persistent Organic Pollutants (POPs)
Integrated Approach Pilot (IAP) Programs ¹ :	Not Applicable
Stand-alone / Child Project:	Not applicable
Implementing Department/Division:	ENV / IPM
Co-Implementing Agency:	Not applicable
Executing Agency(ies):	Then Ministry of Environment (ME), Ministry of Power and Energy (MPE), Ceylon Electricity Board (CEB), Lanka Electricity Company (LECO), Central Environmental Authority (CEA), Industrial Technology Institute (ITI)
Project Type:	Full-Sized Project (FSP)
Project Duration:	60 Months
Extension(s):	4
GEF Project Financing:	US \$4,725,000
Agency Fee:	US \$448,875
Co-financing Amount:	US \$18,989,752
Date of CEO Endorsement/Approval:	2/25/2015
UNIDO Approval Date:	3/18/2015
Actual Implementation Start:	5/04/2015
Cumulative disbursement as of 30 June 2022:	US \$4,376,229.27
Mid-term Review (MTR) Date:	3/30/2019
Original Project Completion Date:	6/30/2021
Project Completion Date as reported in FY22:	6/30/2023
Current SAP Completion Date:	12/31/2023
Expected Project Completion Date:	12/31/2023

¹ Only for **GEF-6 projects**, if applicable

Expected Terminal Evaluation (TE) Date:	2/29/2024
Expected Financial Closure Date:	12/31/2024
UNIDO Project Manager ² :	Carmela CENTENO

I. Brief description of project and status overview

Project Objective

The project has three broad objectives namely institutional strengthening, strengthening of policy and regulatory framework related to PCB and also disposal of PCB containing equipment and waste in Sri Lanka. In capacity strengthening, special reference was given to the managers of PCB that includes technical and managerial staff of the utility sector namely Ceylon Electricity Board (CEB), individual owners of the welding equipment in which the importance was recognized in the mid of the project implementation and decision makers related to PCB management in the selected government institutions and private sector organizations. The other groups of stakeholders make aware of the PCB management includes school children and general public. The objective of these capacity strengthening activities were not only focus on institutional strengthening and awareness raising related to PCB management but also to introduce policy and regulation framework necessary for ESM of PCB waste and PCB containing oil in Sri Lanka.

Baseline

Being a party to the Stockholm Convention on Persistent Organic Pollutants, Sri Lanka is obliged to manage the PCB stocks in the country. The first NIP under the Stockholm Convention of the country prepared in 2006. This NIP identified the necessity of PCB management as a priority problem in the country though Sri Lanka never produced PCBs.

Therefore, following baselines were observed before implementing the project: (i) Lack of adequate legislation to control imports; (ii) Environmental impacts and baseline levels not adequately studied; (iii) Lack of sufficient resources for identification and analysis; (iv) Lack of acceptable treatment, disposal and storage systems for PCB contaminated oil and equipment; (v) identification of contaminated sites and, (vi) Cross contamination of non-PCB oil with PCB oil. Further the Government had faced various constraints in solving the PCB problem such as (i) Low level of awareness and equally low level of resources allocated for information campaigns; (ii) Weak enforcement mechanisms (lack of technical capability to detect and regulate PCBs in use and releases to the environment, and to control PCB imports); (iii) Lack of sustained commitment from other government functionaries; and, need for increased private sector participation (e.g. unwillingness of PCB owners to pay for proper PCB treatment) at the start of the project.

An analysis of Sri Lanka's institutional infrastructure revealed a framework that maybe enabled to implement a sound management of PCBs in the country. The main challenge was how to piece together the initiatives and the existing infrastructures as a collective whole to create a harmonized scheme leading to an efficient and well-informed network on the management of PCBs. Hence, the GEF funds were used to support the incremental budgetary requirement to address the baseline (gaps and barriers)for effective PCB management in the country.

Please refer to the explanatory note at the end of the document and select corresponding ratings for the current reporting period, i.e. FY23. Please also provide a short justification for the selected ratings for FY23.

In view of the GEF Secretariat's intent to start following the ability of projects to adopt the concept of adaptive management³, Agencies are expected to closely monitor changes that occur from year to year and demonstrate that they are not simply implementing plans but modifying them in response to developments and circumstances or understanding. In order to facilitate with this assessment, please introduce the ratings as reported in the previous reporting cycle, i.e. FY22, in the last column.

Overall Ratings ⁴	FY23	FY22
Global Environmental Objectives (GEOs) /	Satisfactory (S)	Moderately Satisfactory (MS)

² Person responsible for report content

³ Adaptive management in the context of an intentional approach to decision-making and adjustments in response to new available information, evidence gathered from monitoring, evaluation or research, and experience acquired from implementation, to ensure that the goals of the activity are being reached efficiently

⁴ Please refer to the explanatory note at the end of the document and assure that the indicated ratings correspond to the narrative of the report

Development Objectives	
(DOs) Rating	

When compared to FY 22 reporting period, project was able to fulfil most of its GEOs in FY23. The Project faced some difficulties in achieving GEOs due to COVID-19 pandemic, the economic crisis and the political unrest that prevailed in the country and also unexpected administrative obstacles experienced in this reporting period. Disposal operations also faced some difficulties due to Basel Convention requirements in some ports. However, the project is able to dispose of around 169 MT low-contaminated PCB oil, cleaned and retrofilled 406.862 MT PCB-contaminated equipment. Ceylon Electricity Board will dispose using its own resources 6 capacitors containing pure PCB and the oil from the 2nd retrofilling cycle.

Implementation Progress (IP) Rating	Moderately Satisfactory (MS)	Moderately Satisfactory (MS)
Implementation is severely aff	ected by the COVID-19 pandemic and the	ongoing economic and political crisis in the
country. Catch-up plans were	formulated and implemented successfully v	vith the support of all stakeholders specially
CEB, INSEE and PTPV. There	fore, IP rating for FY23 is considered as Mod	derately Satisfactory too.

	-	-
Overall Risk Rating	Low Risk (L)	Moderate Risk (M)

This is the last reporting period of the project. Most of the activities related to the project are already been implemented. With regards to disposal of some of the identified PCB stocks belongs to the CEB that were not disposed as they were in operation, has been extensively discussed and agreed. Implementation of long term activities will further be strengthen by supplying the instruments through the project. Therefore, overall risk rating in FY23 is considered as low risk.

II. Targeted results and progress to-date

Please describe the progress made in achieving the outputs against key performance indicator's targets in the project's **M&E Plan/Log-Frame at the time of CEO Endorsement/Approval**. Please expand the table as needed.

Please fill in the below table or make a reference to any supporting documents that may be submitted as annexes to this report.

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress in FY23
Component 1 – Institutional	l strengthening and a	wareness rising		
Outcome 1: Institutional capa	cities and stakeholders	a 'awareness on PCB issu	es strengthened	
Output 1.1: Technical and human resources capacity for PCB management and disposal strength	Number of people (male/female) trained. Availability of an updated PCB inventory. Awareness on PCB issue measurably increased.	Limited awareness on PCB	All the relevant stakeholders and the public are aware of the PCB issue	Most of the capacity building activities were completed during the previous financial years. However, the technical and human resources capacity of INSEE related to transportation and exporting of high concentrated PCB was strengthen through their foreign collaboration of Suez PCB decontamination (Belgium)
Output 1.2: PCB inventory on the utility sector verified (During PPG phase) and completed	Number of transformers sampled and analysed, Availability of a database with PCB transformers data linked to univocal code in PCB labels	Preliminary PCB inventory carried out in 2006, and reassessed in 2012 identified 2210 transformers manufactured before 1986, of which around 48% is considered PCB contaminated, based on results of a limited number (around 10%) of transformers tested. The contaminated transformers were not labelled therefore the updating of the inventory shall include identification and tracking. At least one laboratory	Inventory design and sampling plan Sampling and analysis of at least 2000 transformers + 5% cross check Labelling, tracing and implementation of PCB traceability database	Arrangements are made to store the data of the inventory of transformers belongs to CEB in a server that is to be procured in termination phase. This will enable CEB to enter the data related to their transformers that are in operation and also the units to be added into the system in future while ensuring the systematic long-term management of PCB in CEB. Inventory of Bulk transformers was completed Progress of the inventory of Bulk supply transformers in the industrial sector 1376 number of transformers were visited and information collected. Sample testing for transformers in Tea
		(Lab of the Industrial Technology Institute) is available that has the		Industry is in progress that will lead to inventorying of bulk supply transformers and

Output 1.3: Stakeholder awareness and engagement including NGOs and civil society established	Number of people, institute, enterprises and communities trained and informed on PCB. Number of awareness raising workshops conducted considering a measurably increased awareness on PCB issues.	technical capacity to perform the determination of dielectric oil in transformers. Awareness on the toxicological, environmental, technological and legal aspects related to PCB is very low in the country, at all level.	Awareness raising and training programs covering environmental, toxicology, technological and managerial aspects related to PCB implemented for general public, authorities, custom, research institutions, potential PCB owners	disposing activities will be continued under the Long-term strategy. Bulk transformer Inventory is attached (Annex 1) Stakeholder awareness among the owners of Bulk transformers was initiated and completed during inventorying of the PCB in this sector.
Component 2 – Policy and	Regulatory Framewor	'k	and waste managers	
Outcome 2: Policy and regula	ations relevant to PCBs	formulated and enforced		
Output 2.1: Policy and regulatory framework developed and enforced for PCB management	Number of instruments and guidance documents compliant with Stockholm requirements on PCBs (Annex A, part II) adopted. Availability of a practical strategy for implementing the new PCB regulation agreed with the stakeholders and implemented.	Currently, the only national regulation concerning PCBs is their inclusion in the waste legislation (schedule VIII). No legislation exists concerning the management of equipment containing PCBs (inventory, labelling, management plans, phase out and disposal)	A legislation on PCB drafted and adopted. An enforcement strategy which will clearly define the role and responsibilities of the local and central authority, deadline, incentive and penalties for the PCB owners, reporting and management obligation is drafted and agreed with relevant ministries and industry representatives	Long-term Strategy on PCB management was finalized in FY23. The procuring the equipment necessary for the long term management of PCB was initiated.
Component 3 – Disposal of	PCBs, PCB-containin	ng equipment and waste	s	
Outcome 3: ESM system for	1000 tons of PCBs esta	ablished		
Output 3.1:PCB wastes collected, packaged, transported and stored.	Tons of PCB waste and PCB containing equipment safeguarded	Currently, identification, transportation and storage of PCB containing/contaminated oil is not carried out in an environmentally sound way.	Guidance procedures for the packaging, temporary storage, transportation and disposal of PCBs in Sri Lanka put in place and verified. At least one temporary storage facility established or upgraded for the storage, packaging and transportation of PCBs. Guidance documents for the safe handling of PCBs.	Amount of PCB contaminated oil collected from CEB sites and directly transported to INSEE for disposal is 122 MTs while total weight of transformer cleaned and retro filled is 406.862MT. 47.42 MT (57600 litters) were collected from welding sector by PTPV. The stock was transported and temporary stored and handed over to INSEE for disposal.
Output 3.2: : PCB waste disposed and PCB containing equipment decontaminated based on selected technology option	Tons of PCBs equipment and waste successfully disposed Tons of equivalent CO2 prevented Tons of materials recycled or reused Commercial value of materials recycled and reuse	Currently, the only facility that can dispose PCB in Sri Lanka is the Holcim cement kiln, which can accept an equivalent of 5 kg pure PCB per hour maximum, due to constraints in chlorine input. Other options, including chemical dehalogenation, need to be explored	One or more suitable disposal or treatment facilities, compliant with the SC BAT/BEP criteria, for a capacity suitable to fulfil or exceed project needs, established, tested and permitted. At least 1000 tons of PCBs equipment or waste treated or disposed by means	 a) Six Askarel transformers were drained and dispatched to Belgium for the disposal. b) Total PCB waste disposed by INSEE is 169 MTs. Note1; Amount of PCB contaminated oil collected from PTPVs sites 47 MT Note2: PCB oil from following equipment will be disposed during the termination period.

				 i). Six functioning capacitors with high concentrated PCB ii). Transformers contaminated with low concentrated PCB in DD2 of CEB. Progress reports and destruction reports are attached (Annex 2)
Output 3.3: Long-term strategy on PCB management developed (based on project results)	Number of stakeholders with PCB management plans integrated into the national PCB management plan.	A long-term national plan for PCB management, with special reference with cross PCB contaminated equipment is missing	A country national plan for the phase out or treatment of PCB contaminated equipment, including specific sub-plans for the largest industries (electric power companies and large electricity consumers) drafted, agreed among stakeholders and adopted.	Long term strategy is finalized. Action Plan was prepared and project fund disbursement was done.
Component 4 – Impact mon	itoring and evaluation	n		
Outcome 4: Project managen	nent and M&E establish	ned		
Output 4.1: M&E mechanism designed and implemented	Project Management Office established Midterm and final evaluation conducted			 22nd PSC meetings were held in Austria (UNIDO headquarters) during the period May 16, 2023). It was decided to have a termination phase for the project until 31st December 2023 Meeting minutes attached (Annex 4) Note 1; Follow up meeting related the progress of the activities determined by the 22nd PSC with CEB held on 10th July 2023

III. Project Risk Management

1. Please indicate the <u>overall project-level risks and the related risk management measures</u>: (i) as identified in the CEO Endorsement document, and (ii) progress to-date. Please expand the table as needed.

Describe in tabular form the risks observed and priority mitigation activities undertaken during the reporting period in line with the project document. Note that risks, risk level and mitigations measures should be consistent with the ones identified in the CEO Endorsement/Approval document. Please also consider the project's ability to adopt the adaptive management approach in remediating any of the risks that had been <u>sub-optimally</u> rated (H, S) in the previous reporting cycle.

	(i) Risks at CEO stage	(i) Risk level FY 22	(i) Risk level FY 23	(i) Mitigation measures	(ii) Progress to-date	New defined risk⁵
1	Training effectiveness limited or not properly assessed due to limited	L	L	To be able to participate in the training sessions, candidate will have to pass an initial test which will serve also as baseline; and a final test, which will demonstrate the progress achieved	Risks involved in effectiveness of training programs were monitored and results were included in workshop reports	

⁵ New risk added in reporting period. Check only if applicable.

	participation or limited quality control			and hence effectiveness of the training. The trainees passing the final test will receive an official certificate issued by (by the implementing and executing agencies). The above will ensure at the same time willingness to attend training course and quality/effectiveness of the training		
2	Stakeholders and interest groups not properly identified; Awareness and training program not properly targeted to the audience	L	L	A specific activity on the identification of stakeholders and their needs has been carried out at the PPG stages. Awareness and training programs will be based on the result of awareness and training gap analysis carried out during the PPG stage.	 All stakeholders were well identified and associated risks were well addressed 	
3	Delays in developing and enacting new PCBs guidelines and regulations	М	Μ	The Ministry of Environment, CEB, CEA, LTL, IDB and other key stakeholders will participate as equal partners in developing the guidelines and regulations.	 The proposed amendments to NEA were approved by the Attorney General Department and risks involved were properly addressed. 	
4	Lack of national support for the enactment of regulations to manage PCBs	L	L	The preparation of the new regulations would be an open exercise with participation of all stakeholders. There is a general understanding of the country's obligations under the Stockholm Convention and the need to have the proper tools to deal with PCBs	 National waste management policy is printed and National Chemical Management policy is finalized and printing in progress. National Environmental Act was successfully amended with necessary Cabinet approvals. It will be submitted to the parliament with the approvals of the Attorney General Department. In addition, necessary Cabinet approval was received to include Extended Producer Responsibility concept into the amendments in Sri Lanka and that helps to make the users of PCB legally responsible for the disposal 	
5	PCB-owners' reluctance to comply with new regulations	L	L	In the course of the PPG stage, a great effort has been paid to secure the commitment of electric power industry, by means of a two-fold raising awareness activity: on one side, the government made clear to the electric sector its willingness to effectively improve and enforce a PCBs regulation which will ultimately requires owners of electrical equipment to test their equipment for PCB content and adopt the necessary countermeasures. On the industry side, the owners of contaminated equipment understood that not addressing the PCB issue timely would eventually result in a very high liability and financial risk, and perceived the project as a valuable resource not only to solve the environmental problems related to PCBs but also to establish a green business aimed at the ESM management of PCBs.	 All risks were properly handled. All PCB inventories (Utility and Welding sectors) are prepared. Inventory of bulk transformers is completed. The awareness meetings were held for the Tea sector. Note1: The individual owners are compelled to support for the future activities due to training programs. Note2: Making the PCB inventory of the bulk transformers along with awareness programme promote their disposal 	
6	Poor handling and storage of PCB contaminated equipment representing an environmental and/or health hazard	М	Μ	The project will develop guidelines for the proper handling, packaging, storage and disposal of PCB containing equipment and wastes. Operators involved in this kind of operation will be properly trained	 All risks related to storage facilities were addressed. All activities were handled in accordance with CEA regulations and directions. 	

				before being asked to carry out such activities.	An investigation was carried out to observe the operations.	
7	Natural disasters on stockpiles and POPs containing articles may cause spreading of PCBs in the environment. Sri Lanka climate conditions will affect performance and efficiency of PCB treatment facilities or activities being carried out as part of the project	Μ	Μ	Following UN procedures, new installation/facilities will undergo feasibility analysis and EIA, where the climate and seismic risk are identified and addressed. In general, facilities will not be erected in area subjected to flooding or classified as highly seismic. Design of facilities will be made in compliance with the classification of the area in term of seismic risk. The operational plan will consider emergency response to be adopted in case of natural disasters. Project's activities such as PCB handling and transportation will be carried out according to prevailing climate conditions to reduce the potential for environmental accidental releases	 All these handled in accordance with CEA directions. All risks were identified and addressed and safety precautions were taken as per the CEA guideline and regulations. Handling and transportation were carried out by INSEE which is an entity approved by the CEA for hazardous waste managment. 	
8	Effect of the COVID-19 pandemic on project implementation	L	L	A revised work plan should be prepared to detail the activities impacted.	• Extensive discussions and strong cooperation with the relevant important parties including CEB, PTPV and INSEE assisted to overcome the challenges faced. Accordingly, all risks were well addressed and scheduled activities of the project were implemented.	
9	Effect of the ongoing political crisis on project implementation	М	М	A revised work plan should be prepared to detail the activities impacted.	Extensive discussions and strong cooperation with the relevant important parties including CEB, PTPV and INSEE assisted to overcome the challenges faced. Accordingly, all risks were well addressed and scheduled activities of the project were implemented.	

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 indicate any implication of the COVID-19 pandemic on the progress of the project.

The pandemic caused delay in the deliveries of the project for all components, thus, catch up plans were prepared and implemented. Lock downs negatively affected on the transport and collection of PCB oil from the CEB sites and individual owners of the welding sector. These activities are intensified and expedited once the pandemic was over. Physical meetings were not held or limited to important stakeholders during the pandemic. However, On line meetings were able to minimize the some of the negative effects of not having physical meetings. The implication of COVID-19 pandemic on each component of the project is summarized follows.

Component 1

Activities under the component 1 had competed before the COVID pandemic and progress was reported with the previous PIR.

Component 2

All activities under the component 2 had completed before the pandemic and progress was reported with the previous PIR.

Component 3

The COVID-19 pandemic significantly impacted the progress of the project activities, causing delays in conducting field activities such as collecting contaminated PCB wastes, transporting and temporary storage of collected wastes it was

a real challenge to complete the collection as scheduled due to unprecedented difficulties in carrying out our tasks. Despite these unforeseen circumstances, we persevered and overcame the obstacles through determination and adaptability. Eventually, our project successfully collected those PCB wastes and disposed with the extension provided by the UNIDO.

The COVID-19 pandemic had a profound impact on our project, especially the special research activity involving testing of breast milk for Dioxin and Furan to understand the POPs exposure level of the country. The restrictions and safety measures imposed during the pandemic severely affected our ability to collect samples effectively. As a result, during the PSC meeting held on April 27, 2022, a difficult decision was made to terminate the research activity.

However, recognizing the critical national importance of the work, the PSC held another meeting on July 7, 2022, where they reconsidered the research component. Understanding the significance of the research and its potential contributions, the PSC granted permission to proceed with the research activity once again. Despite the challenges posed by the pandemic, we were determined to push forward, and this permission marked a significant achievement for our project. We remained steadfast in our commitment to carry out the research and contribute to the broader objectives, even in the face of difficulties caused by the COVID pandemic.

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

The 22nd PSC meeting held on May 16, 2023 endorsed the terminal phase of the project which will continue until December 2023. This extension will enable the project to complete the procurement requirements of acquiring the equipment to address the long-term strategy on PCB management. The terminal evaluation and final workshops of the project will also to be completed during the terminal phase.

5. Please provide the **main findings and recommendations of completed MTR**, and elaborate on any actions taken towards the recommendations included in the report.

Main findings of the MTR

Mid-term evaluation was conducted on October 18, 2018 based on six evaluation criteria:

- 1. Relevance and ownership
- 2. Effectiveness at current stage of implementation
- 3. Efficiency at the current stage of implementation
- 4. Assessment of risks to likelihood of sustainability of project outcomes
- 5. Assessment of monitoring and evaluation (M&E) systems, long-term changes, project coordination and management
- 6. Assessment of gender mainstreaming

Table A provides the action taken towards implementation of the main recommendations

	1	1	
Evaluation	Conclusions	Recommendations	Actions taken towards implementing
criteria			the recommendations
1	Ownership is considered	Continued cooperation	PSC meetings and special meetings with
	to be high. Overall, highly	and	relevant authorities (CEB and PTPV) were
	relevant for the	active participation of all	held when and where necessary for
	management and	stakeholders	decision making
	alimination of	Statteriolders	decision making.
	PCBs – leading to nealth		
	and social benefits		
3	Output 1.2: PCB inventory	Expedite inventory	Manual inventorying was started as
	on the utility sector	 Continue manual 	recommended to expedite the work and
	verified and completed	inventory	mobile application was successfully
	Manual inventory	 Consider introduction 	developed and applied to complete the
	commenced; 13 teams	of	inventory.
	with 4-5 persons each	an app to expedite	
	formed; around 10%	inventory with the app	Strategies were defined and
	transformers covered	(Also expected to	implemented to handover PCB wastes
	Welding transformers	reduce the probability of	collected from welding sector to INSEE
	initially not included;	manual typos;	for the disposal.
	however, database of	moreover, possibility of	
	almost 10,000 welding	automatic update of	Training manuals were developed in both
	transformers established	database in future)	Sinhala and English mediums to build up
	by the NGO,	 Inclusion of welding 	awareness about the handling of PCBs
	People-to-People has	transformers and	during, sample collecting, transporting and
	collected 200 samples,	commencement of	temporary storage, until disposal.
	around 125 samples	destruction of PCB	
	already analysed.	contaminated oil from	Safety guidelines and procedures were

Table A

 Old pure PCB oil in storage Very old transformers still stored (probably contaminated) 	the welding transformers • Despite possible adequate storage, in view of the risk of spillage/leakage, disposal at the realistic earliest time period, within the framework of the project, to be considered • Appropriate disposal to be discussed between stakeholders and carried out at the realistic earliest time period. Continuation of capacity building and awareness raising activities.	included in Vendor UNIDO TOR to avoid any malfunction during handling of PCBs until disposal.
Output 1.3: Stakeholder awareness and engagement including NGOs and civil society established • 9 awareness-raising and capacity-building workshops conducted; • Collaboration with the NGO, People-to-People Volunteers • Participation in exhibition, prepared awareness-raising materials – video, bags, books, brochures, posters • Training manuals developed for introduction at universities, vocational training institutes and schools (starting with primary) by the CES	Provide further support and information as necessary	Necessary awareness building activities were conducted as scheduled and now completed. Training for General Public Participated 1100 Male 660 Female 440 M:F Ratio 3:2 Training for Staff or officials Participated 614 Male 498 Female 116 M:F Ratio 4:1 Grand total Participated 1714 Male 1158 Female 556 M:F Ratio 2:1
Output 2.1: Policy and regulatory framework developed and enforced for PCB management. • Gap analysis report completed • Concept paper with suggestions for the formulation of the framework legislation drafted – currently being reviewed by the Legal Department – evaluation to review the Documents		National Waste Management policy has printed. National Chemical Management policy was submitted for the cabinet approval and amendments recommended by the cabinet is addressed and resubmitted to the cabinet for final approval.
Output 3.1: PCB waste collected, packaged, transported and stored. • Yet to commence (after the completion of the inventory	Expedite the inventory (app) as mentioned earlier • PSC to consider the	Mobile application and web database were developed by the IT department of the

	activities in the PIF, should have been completed in the	depend on the completion of this activity	Inventory of the bulk transformers is completed and PCB inventory of this sector
4	strong interest, support, commitment and cooperation was observed, which are conducive to implementation of project activities. Inventory ongoing • According to timeline of	Expedite inventory, as several activities	PCB Inventories in utility sector and welding sector were prepared.
	Output 3.3: Long-term strategy on PCB management developed (based on project results) • Training and inventory manual drafted; long term strategy in the Guidance Document, which is yet to be drafted At this stage of implementation, national capacity, strong interest support		
	New facility/operator would have to receive approval from the Central Environmental Authority (CEA),Sri Lanka and to be established in Sri Lanka and to carry out the disposal.		implement the related activities. (Annex 5)
	Output 3.2: PCB wastes disposed and PCB containing equipment decontaminated based on selected technical option • Yet to commence (after the completion of the inventory) • Evaluation visited existing facility, INSEE Cement Kiln, in Puttalam: • PCB-contaminated oil has been destructed at the above Cement Kiln in the past (2007) • Includes well-equipped laboratories, with potential for extending/expanding capacity • Possesses a GC for PCB analysis – however, not functioning currently, needs to be repaired/replaced.	contaminated oil from the welding transformers. Business Plan to be prepared PSC to consider the commencement of disposal of PCB contaminated oil from the welding transformers; explore possibilities of disposal, in line with UNIDO and national procurement procedures, as required. Inclusion of information, including on cross contamination, and lessons learned from the project (at project completion) in the long- term strategy. • Expedite inventory	Mobile application and web database were developed for inventorying the PCB contaminated equipment in welding sector and the inventory is completed New contract agreement signed with the PTPVs to collect, transport and temporary storage of PCB contaminated waste materials from CEB and welding sector. Every year PIR was prepared including the work plan. According to the contract agreement signed with the PTPV, they have to collect, transport and temporary storage of PCB contaminated waste materials until disposal. Disposal of the PCB contaminated oil in Sri Lanka has already assigned to INSEE through contract agreement. Accordingly, INSEE is responsible for retrofilling of utility sector transformers, collection and disposal of PCB contaminated oil. They are also responsible for disposal of the Obsolete transformers with high concentration of PCB oil, supply of PCB free oil to CEB to replace the oil removed and disposed and collection of PCB contaminated oil from the temporary storage of PTPV and dispose them. Long term strategy was developed. The equipment that are to be procured during the termination phase will be helpful to implement the related activition (Annex 5).
		collection, transportation and disposal of the	purposes to expedite the inventorying process. Accordingly, PCB Inventory of utility sector has completed.

3rd vear of	Expenditure	of co)-	
implementation	finance to	b	е	
 Co-finance being spent, 	documented.			
however, not			N	Note 1:
documented			C	Co-Financing statements from relevant
 No issues regarding 			а	agencies will be collected during the
project expenditures			te	termination period as some of the activities
were mentioned to the			а	are to be continued in this phase too.
evaluation team				
Remain time duration of				
the project is considered				
to be slightly stringent to				
accomplish the inventory,				
selection of technology,				
and destruction of 1000t				
Of PCBs/PCB-				
contaminated equipment;				
however,				
it is not considered to be				
unrealistic				
	1			

Annex 5

https://drive.google.com/drive/folders/1hPBXY5yIngECiSf6PSpkIHyByvKyQb8H?usp=sharing

Annex 6

Utility sector inventory https://drive.google.com/file/d/1opS8I-jl8y5JtMX7K1mpq7V5aUNGhcEW/view?usp=sharing

Welding sector inventory

https://drive.google.com/drive/folders/1AfXpGkRwNmybdl1EWrkFIWfZ5vK81Fqe?usp=sharing

Industrial sector (bulk supply) Inventory

https://drive.google.com/drive/folders/1PSY_c6uu4DT-wtUbwPvPq4c9DSoqlZRy?usp=sharing

IV. Environmental and Social Safeguards (ESS)

1. As part of the requirements for **projects from GEF-6 onwards**, and based on the screening as per the UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP), which category is the project?

Category A project

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.

	E&S risk	Mitigation measures undertaken during the reporting period	Monitoring methods and procedures used in the reporting period
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(i) Risks identified in ESMP at time of CEO Endorsement	NA	NA	NA
(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).

The project has successfully engaged with various stakeholders throughout the implementation of the project and has received their full support and commitment. The PSC comprises of stakeholders from various ministries, the academia, NGOs and various institutions and all members have fully supported and provided sound direction to the project.

CEB, the main PCB owner, has been engaged with the inventory process and provided manpower support to complete the activity. Frequent Changes in the high level management of CEB was a challenge for the implementation of the project. However, PMU maintained a good relationship with the senior technical staff throughout the implementation period. They convinced positive affect to the high level management when they are changed. Hence, PMU was able to solve many of the challenges faced during implementation period. Consequently, outcome of the project were achieved.

The NGO partner, People to People Volunteers, have successfully raised awareness on PCB issues, especially in the welding sector, the informal user of used PCB oil. Involvement of the NGO partner in managing the PCBs in welding sector was recognized by GEF and this was highlighted in the publication named stakeholder engagement. They were contracted by UNIDO for sampling, retrofilling, collection transport and temporary storage of PCBs collected from welding sector. Due to the similar nature of the activities to be carried out them in the welding sector, they are given a contract of making bulk user transformers inventory by UNIDO as proposed and approved by PSC.

INSEE is the disposal partner of the project. They are given a contract of importing the PCB free oil and retrofilling of the transformers belongs to CEB and disposal of PCB contaminated oil belongs to CEB as well as the stocks collected by PTPV. They faced a challenge of getting the approval of exporting the high concentrated PCB oil to Belgium as Malta refused to transport of the high concentrated PCB oil (Askarel oil) via their harbours. PMU assisted them to get the approval of Malta with the assistance of BRS Secretariat by connecting the officers responsible for handing the Basel and Stockholm Conventions.

One of the challenges faced by the PMU is to maintain integrity of the responsible officers of the key stakeholders namely PMU, CEB, INSEE and PTPV. Therefore, a WhatsApp group was introduced to discuss the issues related to the project around the clock. This assured effective communication between the relevant members of each institution.

Project faced enormous challenges in testing the breast milk samples collected to check the contamination level of exposure for POPs through Dioxin and Furan. Initially the collection of breast milk samples were delayed due to COVID 19 pandemic. Further, exportation was effected due to restriction of the China to accept the samples due to COVID 19 pandemic. The exportation of the samples were then effected due to administrative barriers imposed by Ministry of health. Due to these delays, the 20th PSC held on 27th April 2022 decided to terminate this activity. However, as the samples have been collected and China has again agreed to accept the samples 21st PSC held on 7th July decided to reconsider this considering the importance of the findings of the proposed activity. Therefore, discussions have started to get the approval of Ministry of Health for exportation of the samples. That is an example for stronger stakeholder cooperation when the project face difficulties in implementing some activities.

PMU is mainlining the good relationships with the other stakeholders. Their feedbacks are officially received in the PSC meetings. In addition, their feedback is received from informal discussion or formal letters. This guaranteed the support of other stakeholders for the project implementation.

Possessing the equipment needed for fulfilling activities identified under the long term strategy for management of PCB will be taken place during the termination phase. As the equipment are scheduled to be owned by the main implementation partners, it will strengthen the stakeholder engagement in long run. In summary, the project has fully harnessed the strengths of each project partner and stakeholders that led to an effective stakeholder engagement despite of many challenges.

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.).

GEF has identified the welding sector component of the project as a project having higher social impact and published an article in their annual report. The UN country-level annual report proponents requested a project briefing and project photos for inclusion in their report.

Both INSEE and PTPV are willing to work with UNIDO and also with Ministry of Environment due to the facilitation role played by both institutions in fulfilling the contacts issued to them. CEB believe that this relationship can be used positively in environmental related activities implemented by them.

3. Please provide any relevant stakeholder consultation documents.

5314-Minutes of the 22 PSC meeting May 16, 2023
5314_Minutes of the 21 PSC meeting July 7, 2022
Project Status Report (PSR) – prepared by INSEE
5314-1 Interim report
5314-2 Interim report
5314_Final report
Project Status Report (PSR) – prepared by PTPVs
5314_Project final report
5314_Project Final report (UNIDO standard)
Memorandum of Agreements (MoA) and Cooperation Agreements (CA) Signed
No any memorandums or cooperation of agreements signed
Project Technical Working Group Meetings
No any technical working group meetings were conducted
Relevant Stakeholders Meeting
5314_CEB Meeting minutes July 10, 2023h
5314_CEB Meeting minutes October21, 2022
Field visits
Inginiyagala site inspection

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 tried to maintain the gender equity to the maximum extent possible However, since the project is highly technically oriented with an engineering background, involvement of female officials is very limited due to the fact that study of engineering is preferred by males than females. The same pattern exist related to the workers of the welding sector too. Though it is gradually changing, still we have more males than females among the CEB engineering staff as well as among welding workers.

However, project was able to maintain male to female to mail ratio of 2:1 for overall training personal and 4:1 for all staff officials training programs. It is important to note that the male to female of the PMU is around 1:2 which is completely opposite to the ordinary pattern. At present majority of the top level positions related to the project are dominated by women.

The number of participants to project activities for both Component 1 and Component 2 are summarized as follows:

Γ	Type of training	No. of Participants	Male	Female	M:F ratio
	General Public	1100	660	440	3:2
	Staff or officials	614	498	116	4:1
Γ	Grand total	1714	1158	556	2:1

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

- 5314_Longterm Strategy
- 5314_IRPF Reporting Targets TCS cut off date CENTENO Sri Lanka
- 5314-PCB master sheet 25.05.2022_unido_sa Sri Lanka

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

• Not applicable for this financial year

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.

The project comprises of two main components namely Ministerial component and UNIDO or the direct component. The activities belong to Ministerial component include awareness raising, policy formulation and inventory building. All these activities are successfully completed.

Based on the inventories, UNIDO contracted welding sector activities to PTPV and consequently sampling, testing, retrofilling, collection and temporary storage of PCB from welding sector was completed. In addition, completion of bulk transformer inventory was handed over to PTPV by UNIDO with the approval of PSC considering the similarity of this activity with the activities carried out by them in the welding sector.

TOR for disposal of PCB was assigned to the INSEE. Consequently, disposal activities were completed in this year. The total amount of PCB oil and waste disposed by INSEE is 169 MTs. Six Askarel transformers were exported to Belgium for disposal. However, still 6 capacitors that contain Askarel and low concentrated PCB oil from five transformers in DD2 to be retrofilled were unable to dispose as they are in the operation and could not replace them due to financial and technical difficulties experienced by CEB at the time of disposal operations were been carried out by INSEE.

Project faced enormous challenges in testing the breast milk samples collected to check the contamination level of exposure for POPs through Dioxin and Furan. Initially the collection of breast milk samples were delayed due to COVID 19 pandemic. Further, exportation was effected due to restriction of the China to accept the samples due to COVID 19 pandemic. The exportation of the samples were then effected due to administrative barriers imposed by Ministry of health. Due to these delays, the 20th PSC held on 27th April 2022 decided to terminate this activity. However, as the samples have been collected and China has again agreed to accept the samples 21st PSC held on 7th July decided to reconsider this considering the importance of the findings of the proposed activity. Therefore, discussions have started to get the approval of Ministry of Health for exportation of the samples.

2. Please briefly elaborate on any **minor amendments**⁶ 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	N/A
	Components and Cost	N/A
	Institutional and Implementation Arrangements	N/A
	Financial Management	N/A
-	Implementation Schedule	Since the project has extended four times, implementation schedule was adjusted accordingly.

⁶ 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%.

Executing Entity	N/A
Executing Entity Category	N/A
Minor Project Objective Change	N/A
Safeguards	N/A
Risk Analysis	N/A
Increase of GEF Project Financing Up to 5%	N/A
Co-Financing	N/A
Location of Project Activities	N/A
Others	N/A

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

During this reporting period, the project has a financial disbursement of US\$ 4,376,229.27 which is 93% of the project resources. 75% of the total disbursement was allocated to the environmentally-sound management of PCB wastes, including assessment, disposal and provisions for long-term management. Procurement for equipment to ensure sustainability of PCB management in the country is currently being undertaken.

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.

The project activities have been completed and the long-term strategy is currently being drafted. Terminal evaluation is planned for December 2023 and the Final Workshop in January 2024.

X. Synergies

1. Synergies achieved:

N/A

3. Stories to be shared (Optional)

N/A

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 <u>OpenStreetMap</u> or <u>GeoNames</u> use this format. Consider using a conversion tool as needed, such as: <u>https://coordinates-converter.com</u>

Location Name	Latitude	Longitude	Geo Name ID	Location and Activity Description
Ministry of Environment	6.90°,	79.92°,	1250164	Battaramulla, Sri Lanka
				Project Executing agency
Ceylon Electricity Board	6.93°	79.84°	1248991	Colombo, Sri Lanka
				Project Executing Agency
INSEE	7.17°	79.89°	1229293	Puttalam, Sri Lanka
				Contractor of disposal
				Disposal process
PTPVs	7.18°	80.02°	1246863	Essella, Sri Lanka Contractor for operations related to Welding sector,
				i). Cleaning retrofilling and temporary storage of PCB contaminated oil until handover to the INSEE
				ii). Preparation of Bulk supply transformer inventory

Please see the Geocoding User Guide by clicking here

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





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EXPLANATORY NOTE

- 1. Timing & duration: Each report covers a twelve-month period, i.e. 1 July 2022 30 June 2023.
- 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 Envir	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 <u>most</u> 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 <u>most</u> components in <u>not</u> 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 75% 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 51% and 75% 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 26% and 50% that assumptions may fail to hold or materialize, and/or the project may face only moderate risk.	
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 low risks.	