UNEP GEF PIR Fiscal Year 2021

1 July 2020 to 30 June 2021

Select Project: 5532 SADC PCB

TIP →

1- Identification

1.1 Project details

GEF ID		5532	Umoja No:		SB-001062.01.05
Project Title		Disposal of PCB Oils Contained in Transformers and Disposal of Capacitors Containing PCB in Southern Africa			
Duration months	Planned	60	GEF financing amount		USD 7,710,000
	Extension	-	Co-financing amount		USD 34,661,319
Division(s) Implementing the project		Economy Division, GEF Chemicals and Waste, Chemicals and Health Branch	Date of CEO Endorsement		1-Jun-16
Name of co-implementing Agency		-	Start of Implementation		1-Sep-16
Executing Agency(ies)		Africa Institute	Date of first disbursement		1-Nov-16
Names of Other Project Partners		UNEP K&R Unit, MAPx	Total disbursement as of 30 June		USD 2,905,362
Project Type		FSP	Total expenditure as of 30 June		USD 2,395,273
Project Scope		Regional	Expected Mid-Term Date		1-Mar-19
Region (delete as appropriate)		Africa	Completion Date	Planned	31-Jan-22
Names of Beneficiary Countries		Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, Tanzania, Zambia, Zimbabwe		Revised	-
Programme of Work		PoW 5: Chemicals, waste and air quality	Expected Terminal Evaluation Date		30-Jun-22
GEF Focal Area(s)		Chemicals and Waste	Expected Financial Closure Date		1-Sep-22

EA: UNSDCF/UNDAF linkages

The objective of the UNDAF is to maximize individual and collective impact of all UN programmes of assistance in support of the national plans and priorities of recipient Governments.
Chemicals and waste are integral to almost all sectors of society, and their sound management is essential for protecting human and environmental health. This is the case in the participating countries. The project also aims to enhance the collaboration and coordination of system wide operations in improving efficiency and effectiveness of UN development assistance to all participating countries, it brings together Environment, power supply and the general national governance in environmental management.

EA: Link to relevant SDG target(s) & indicator(s)

Environmentally sound management of "toxic chemicals" is the topic of Chapter 19 of Agenda 21. A substantial use of chemicals is essential to meet the social and economic goals of the world community. Since chemicals are primarily source of pollution, climate change and disease burden, the project thus has direct links to SDGs through preventing or minimizing the generation and use of hazardous chemicals and wastes as part of an overall integrated cleaner production approach and eliminating or reducing to a minimum transboundary movements of hazardous waste; thus ensuring that targets 3- Good health and wellbeing; 6-Clean water and sanitation; 7-Affordable and clean energy; 11-Sustainable cities and communities; 12-Resposnible consumption and production; 13-Climate action;14-Life below water; 15-Life on land and 17-Partnerships for the goals are all realized. Given that chemicals and waste affects all aspects of development, the sound management of PCBs and their waste is relevant and support the implementation of many other, if not all SDGs.

1.2 Project description

The Project Objective is to reduce environmental and human health risks from PCB releases through the demonstration of a regional approach to the introduction of cost-effective and socially acceptable environmentally sound management (ESM) of PCB oils, equipment and wastes held by electrical utilities and other PCB owners in participating countries. The project and its proposed activities are consistent with the GEF-5 Chemicals Results Frameworks' goal "to promote the sound management of chemicals throughout their life-cycle in ways that lead to the minimizations of significant adverse effects on human health and the global environment." In particular, the project will contribute to Objective 1 "Phase Out POPs and Reduce POPs Releases"

The project is Implemented by UNEP chemicals and health branch, executed by Africa Institute in the 12 countries namely Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland (now Eswatini), Tanzania, Zambia and Zimbabwe in partnership with Southern African Power Pool (SAPP). It has been designed and executed under four components:

Project component 1: Enhancement and harmonization of national regulatory infrastructure and sustainable
Mechanisms
In this component the National regulation and international requirements would be identified in the 12 participating countries including infrastructure and enforcement capacities resulting in a regionally harmonized approach for the environmentally sound management of PCB oils, equipment and wastes, such that National regulations in 12 countries on the ESM of PCB and PCB wastes in the context of the Stockholm and Basel Conventions would be updated and brought to a common standard.

Project component 2: Enhanced capacity for ESM of PCB containing equipment in service
Detailed inventories of PCB containing oils and equipment held by utility and private companies in 12 participating countries would be developed (in use and in waste) with the outcome that monitoring PCB containing equipment in service and tracking system be established to follow until final phase out of PCB in electrical equipment in the 12 participating countries

Project component 3: Regional mechanism for ESM of decommissioned and phased out PCB liquids and equipment
Training of utilities for collection, draining and transport of PCB contaminated transformers would be undertaken and two thousand metric tonnes (2000t) of PCB oil, PCB contaminated oil, and PCB equipment would be stored and decontaminated at national facilities and at least 1,000 capacitors containing PCB oil identified and collected for export, while 500t of Askeral transformers, capacitors, and PCB contaminated oil (concentrations >2000ppm) would be exported for destruction at a dedicated facility, all towards PCB and PCB containing equipment disposed of in an environmentally sound manner in accordance with the Stockholm Convention from 12 countries, and verified through independent monitoring.

Project component 4: Stakeholder engagement and information exchange to facilitate dissemination of lessons learned, and development of regional capacity to finalize phase out of PCB and model developed for replication.
The planned outcome of this component is that Stakeholders are aware of the need to phase out PCBs in an environmentally sound manner and best practices developed for implementing ESM for ongoing management of in-use transformers in project countries, and for subsequent projects. To this end National and regional communications / outreach / awareness strategies would be developed and implemented; Lessons learnt framework would also be developed for replication and extension at national level following adoption by national authorities.

1.3 History of project revisions

Version	Date	Main changes introduced in this revision
Rev1	01/04/2019	Management Review

2- OVERVIEW OF PROJECT STATUS

UNEP PoW

UN Environment Subprogramme(s)	Subprogramme 5: Chemicals, waste and air quality	Specify the relevant Expected Accomplishment(s) &	PoW 5: (a) (i) (ii) and (b) (i) (ii)

2.1 UNE

TM: Progress towards delivering the stated PoW

all 11 national legislation reviews completed, 3 countries have drafted national PCB phase out regulations
236 tonnes of waste owned by public utility companies is confirmed for disposal; three countries have reported completed Risk communication exercise

2.2. GEF Core Indicators

GEF Core Indicators	N/A (This is a GEF - 5 Project)	N/A (This is a GEF - 5 Project)
Indicative expected Results	-	-

TM: GEF core indicators targeted by

Indicators	Expected value at	
	Mid-term	End-of-project

2.3 Impl status & risk*

TM

	PIR #	Rating towards outcomes	Rating towards outputs	Risk rating
FY 2021	5th	MS	MS	M
FY 2020	4th	MS	S	M
FY 2019	3rd	MU	MU	M
FY 2018	2nd	MU	MU	M
FY 2017	1st	MS	MS	L

Summary of status.

Following the 5th PSC meeting, through efforts of the PM and TM and targeted technical assistance, a fair progress has been made. Legal reviews are complete and regulatory reforms underway, with 3 countries having drafted requisite PCB phase out regulations. Inventories are 90% completed, with 3 countries still to complete distribution equipment. More contaminated equipment was discovered in Madagascar. The Risk communication has been rolled out in all 11 out of 12 countries, while 236 tonnes have been confirmed for disposal in this year. Over all these, a phase out plan concept and template was developed and shared with countries for consultations and three countries have drafts that are being evaluated. Good practices were identified for sharing as lessons learnt. based on the targets and objectives of the project, these progress is classified Moderately satisfactory, under the circumstances of COVID 19 restrictions of work. Countries are ready for the disposal contractor.

*section will be uploaded into the GEF Portal

2.4 Co-finance

EA: Planned Co-finance (total only) USD 34,661,319

EA: Actual to date: USD 2,481,134

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

The Co-financing has not reached the expected levels. This is only attributed to under reporting as countries struggle to keep track of other finances contributed at national level and how to calculate the soft in kind contributions.. Templates have been provided to assist focal persons in calculations. There are countries that have gone a long way in co-investing in facilities such as temporary storages and went on to seek additional funding in awareness campaigns. Further, the expected investment into equipment replacement has both happened.

EA: Stakeholder engagement (will be uploaded to GEF Portal)	SAPP is the sub regional association of utility companies for SADC countries, identified as a key stakeholder in the project it is a member of the Steering Committee. In August 2019, the EA and IA presented the project to the Annual General Meeting of SAPP in Harare, to increase their engagement especially in bringing its members to provide technical support and infrastructure for safeguarding PCBs; and invited them to the Phase Out Plan initial meeting in Feb 2020. This was instrumental in obtaining support from the utilities management to provide requisite assistance. Subsequently SAPP has signed an MOU to undertake a capacity strengthening leg of risk communication and capacity building in the Utilities and to further assist in the provision of personnel and equipment for collection of contaminated oils and equipment. A survey for energy efficiency saw an increase in participation of technical staff of utilities in discussions and provision of required information for cost-benefit analysis report. Mozambique and Tanzania have engaged NGOs in their awareness program and have reported execution of the awareness program complete within the reporting period. countries are continuing to engage wider stakeholders with regard to Phase out plans and legal reforms to address ESM of PCBs as per compiled review. The U4E energy efficiency initiative of UNEP/GEF has targeted distribution transformers in the current phase. The UNEP TTA has jointly developed a study on cost benefit assessment for the replacement of PCB-contaminated, in-service transformers as part of the broader phase out plan initiative.
EA: Gender mainstreaming (will be uploaded to GEF Portal)	Gender mainstreaming has to a lesser degree been evaluated and only in so far as the vulnerable groups are assessed at country levels. The most vulnerable groups have been found to be workers/technicians in the utility companies and school children who may be exposed to leaking transformers in their own yards. Vulnerable groups such as children, women and workers in utility companies has been receiving targeted risk communication through schools, community based organization and SAPP for utilities. Continuing TV and radio program are focusing more on these groups. The management review had identified that the original project documentation did not include a gender and human-rights based approach. Development of a coordinated strategy is included in the scope of the Targeted Technical Assistance being provided by UNEP.
EA: Environmental and social safeguards management (will be uploaded to GEF Portal)	Environmental and social safeguards are undertaken under the preview of risk communication and restricting access to known sites containing PCB contaminated equipment. The EA has been given assurance that disposal of PCB wastes through auctioning of equipment has been stopped in all countries now that project is set to dispose available wastes. The international tender for disposal of equipment is subject to rigorous environmental and health and safety standards that are part of UNEP's procurement service standard.
EA: Knowledge activities and products (will be uploaded to GEF Portal)	The database developed following the inventory verification is being mapped through the MapX program and good practices in the ESM of PCBs is being documented for sharing in various platforms. These shall be the main knowledge products for sustainability of PCB phase out. They can be accessed (after approval of account) at https://app.mapx.org/?project=MX-U83-0SB-Y2T-A48-GFS&language=en Press releases were done with interviews after the RSC meeting and at the BRS COPs in May 2019. These can be accessed at https://www.unenvironment.org/news-and-stories/story/dangers-modern-magic
EA: Stories to be shared (will be shared with UNEP &GEF communication division)	Given the changing environment and governance in participating countries, including the restrictions imposed by the COVID19 pandemic, good stories to tell are those of achievements made without legal force, where government department used authority to coerce stakeholders to comply with the project requirements. Innovative ways of risk communications were also developed during COVID restrictions using media more and more interactively to get also get target groups to participate thereby grasping the messages more and effectively.

*section will be uploaded into the GEF Portal

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SADC PCB

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equipment

3. RATING PROJECT PERFORMANCE

3.1 Rating of progress towards achieving the project outcomes

Project objective and Outcomes	Indicator	Baseline level	Mid-Term Target	End of Project Target	EA: Summary by the EA of attainment of the indicator & target as of 30 June	TM: Progress rating
Objective						
To reduce environmental and human health risks from PCB releases through the cost effective and socially acceptable environmentally sound management (ESM) of PCB oils, equipment and wastes held by electrical utilities and other PCB owners in participating countries	No. of participating countries with legislative framework for ESM of PCB in place	Lack of legal background, administrative and technical capacities for ESM of PCB at national level limiting from participating countries to fulfil their obligations Legislative review completed to varying extent in each countries' NIP No disposal of PCB contaminated equipment; Risks for human health and environment remain		12 countries legislation reviews and those found to be inadequate develop legislation; 12 countries complete Inventory verification and documentation in databases; Regional disposal plan developed and approved; 2000t of PCB Oils, equipment and wastes successfully disposed of; 2300 t of in-use PCB oils and equipment scheduled for replacement and ESM disposal in national phase out plans	All 11 countries have completed the legal review and set out to update the regulations to close the gaps identified in national legislation. 3 of the countries have to start at primary legislation and the Bills have been drawn for presentation to their parliaments. Three others have relatively adequate legislation and all they need is to establish are implementation modalities, of the remaining five, there have already drafted regulations which are being subject to public	S
	No. of countries have strengthened administrative and technical capacities, as well as PCB disposal plans (to 2025) in line with the Stockholm Convention				Inventory verification is completed in Botswana, Lesotho, Seychelles, Malawi, Tanzania and Zambia. Mozambique, Eswatini and Namibia need a survey of pole mounted distribution equipment comprehensively. The Regional disposal plan has been established and Phase out planned to 2025 being drafted.	MS
	No. of tons contaminated equipment disposed of from 12 countries.					
	-				The regional Disposal plan has been established for the first batch of confirmed inventories	S
Outcome 1						
Outcome 1: National regulation and international requirements identified in 12 participating countries including infrastructure and enforcement capacities resulting in a Regionally harmonized approach for the environmentally sound management of PCB oils, equipment and wastes	No. of countries submit for adoption national regulation with minimum requirements of Stockholm and Basel Conventions supported by Guidance documents for different aspects of ESM of PCB	12 countries without proper legislative framework for management of PCB	Year 1: NCCs 8 established Year 3: 12 countries submit legislation review and those inadequate regulations submit for adoption PCB regulation, which specifically prohibit resale of contaminated oil and units		Three countries have drafted PCB phase out regulations.	MS
	No. of regional action plan developed and adopted through appropriate means and processes at the regional level;					
	No. of application of regional action plan in participating countries				national Phase out plans are being reviews as drafted by 3 countries to date	S
Outcome 2						
Outcome 2: 12 countries monitoring PCB containing equipment in service and tracking system established to follow until final phase out of PCB in electrical equipment	No. of regional template for inventory and tracking system development;	Limited activities on PCB in the countries; No detailed inventories available; No phase out plan		Year 5: 12 countries complete Inventories; 12 countries with information included in national databases; 12 countries' phase-out plans endorsed at national level by utility companies and other PCB containing equipment owners;	A regional data base of contaminated equipment with locations have been dis[played on MapX and is kept for tracking at regional level.	S
	No. of countries to adopt and use template; No. of countries develop and adopt inventory verification plans;				N/A in the report period	
	Regional phase out plan detailed until 2025 in accordance with the phasing out priories of Stockholm convention and Code of practice for the safe use of fully enclosed askarel-filled electrical equipment				The national Phase out plans will be adopted in the next PSC meeting and consolidated into a regional Phase out plan	MS
Outcome 3						
Outcome 3: PCB and PCB containing equipment disposed of in an environmentally sound manner in accordance with the Stockholm Convention from 12 countries	500 tonnes exported for destruction in dedicated facility;	No licensed PCB waste handling companies; PCB contaminated transformers and capacitors not managed and disposed in ESM; No independent monitoring PCB contaminated transformers and capacitors not managed according to ESM	Year 3: inventory of waste equipment for disposal confirmed Year 3: 1 agreed international transport and disposal tender;	Year 4: 500t of PCB oil and PCB equipment disposed of in licensed facility abroad. Year 6:Up to3,800t contaminated oil dechlorinated locally	236 tons already release in 8 countries for disposal. More waste identified in Madagascar and 3 other countries' waste to join in Phase 2	S
	1500 Tonnes of waste equipment treated in the region				The decontamination pilot contract under development where all remaining contaminated equipment and oils will be dechlorinated.	MS
Outcome 4						
Outcome 4: Stakeholders are aware of the need to phase out PCBs in an environmentally sound manner and best practices developed for implementing ESM for ongoing management of in-use transformers in project countries, and for subsequent projects	Vulnerable groups identified across the region, and changing behavior to reduce risks of PCBs	No regional PCB ESM reports, some		Year 4: vulnerable groups identified, and appropriate	10 countries have developed and rolled out their risk communication strategies where by in large, workers in utility, school children and women were identified as vulnerable groups.	S

	Utilities change practices to prevent contamination by PCB	regional learning and advice through SAPP Minimal communication of risks associated with PCBs to vulnerable people. Vulnerable communities remain unidentified. Utilities auction decommissioned equipment even if it may be contaminated by PCB		Year 4: vulnerable groups identified, and appropriate messages proposed by regional communications strategy endorsed for use at national level Year 5: national utilities sign declaration to gradually replace and prevent sale of contaminated equipment Year 6: owners of PCB in other sectors commit to replacing and preventing sale of contaminated equipment Year 6: Disseminated best practices for introduction of ESM taken up regionally and internationally;	SAPP is undertaking a capacity building within Utilities and updating SOPs for ESM of contaminated oils and management of equipment	MS
	Lessons and best practices generated by the project adopted by PCB owners, private sector, regional agencies and regional associations and other stakeholders				Three practices have been identified and recorded as lessons to be shared and learnt in the project.	MS

3.2 Rating of progress implementation towards delivery of outputs

Output	EA: Expected completion date	Implementation status as of 30 June 2020 (%)	EA: Implementation status as of 30 June 2021 (%)	EA: Progress rating justification, description of challenges faced and explanations for any delay	TM: Progress rating
Under Comp 1					
1.1 National regulations in 12 countries on the ESM of PCB &PCB wastes in the context of the Stockholm &Basel Conventions reviewed &brought to a common standard.	Dec-21	National legal review reports completed and action plans developed for update of regulations in 8 countries with 3 having adequate regulatory regime.	100%progress as legal reviews are completed and 50%regulations are yet to be developed in 5 countries	The review has indicated the gaps that need to be filled in all countries and the process of filling the gaps also identified and has been started. some progress in the period is 3 draft regulations.	MS
1.2 Improved administrative capacity for controlling PCB in 12 participating countries.	done	Completed in Sept 2018	N/A		S
Under Comp 2					
2.1 - Detailed inventories of in-use PCB containing oils and equipment held by utility companies in 12 participating countries developed	Dec-22	90%of equipment coverage attained in 10 countries totaling 999 Tonnes to be part of second disposal and/or phase out plan	50% of disposal plan with 236 tonnes to be collected in 2021	Inventories have been completed to 95% level indicating a total weight of contaminated equipment at 1 240 tons.	S
2.2 - Stakeholder engagement plans for long term phase out of PCB containing oils &equipment held by other sectors in 12 countries developed &endorsed (in compliance with new regulations as per component 1)	Nov-21	Regional Phase Out Concept finalized. Consultation with utilities done in Feb 2020 meeting. Regional consultant being recruited for cost benefit assessment and country support for national Phase Out Plans.	3 draft phase out plans .30% of all countries	Three drafts have been received and are being evaluated by experts. The best will be used as a lesson to all remaining countries.	MS
Under Comp 3					
3.1 - Detailed inventories of waste PCB containing oils and equipment held by utility companies in 12 participating countries developed	Dec-21	Four(4) countries have fully completed inventories at generation, transmission and distribution levels. Three(3) countries finalizing sampling while 4 more countries are active in the field. (Madagascar, Namibia, eSwatini and Mozambique.	95%	8 countries have comprehensive database of contaminated equipment. only three remain a bit behind	MS
3.2 - Training of utilities for collection, draining &transport of PCB contaminated transformers	Dec-21	All utilities have recommitted to provide safeguarding teams and infrastructure once the disposal contractor is in place. Training delayed by COVID19.	0%	Training to be undertaken by disposal contractor and the contract is under negotiation	MU
3.3 - At least 500 tonnes of PCB contaminated equipment >2000ppm identified and collected for export/treatment (under Output 3.5)	Jun-22	236 Tonnes confirmed for disposal in 2020.	0%	Disposal contract under negotiation	MU
3.4 - Up to 3,800t of PCB contaminated oil <2000ppm identified and where possible removed from units for treatment as part of the long term phase out plan (Component 2)	Dec-22	The treatment method has been identified and to be piloted before application in the region.	0%	Tender process just started for decontamination pilot.	MU
3.5 - PCB from transformers &full capacitors (expected 500t) exported for destruction at a dedicated facility	Dec-22	236 Tonnes confirmed for disposal in 2020.	0%	Disposal contract under negotiation	MU
Under Comp 4					
4.1 National &regional communications / outreach / awareness strategies developed &implemented.	Dec-21	5 countries have completed the awareness program but continue to rum other complements. The rest are still in the process of outreach following materials development.	70%	all countries started rolling/implementing the awareness strategies 2 years ago. three more are remaining to report on their completion.	MS
4.2. Lessons learnt framework developed for replication and extension at national level following adoption by national authorities.	Dec-22	3 lessons recorded as best practices and will be further developed for sharing after the 5th PSC	50%	three stories developed. countries are reporting on further experiences for discussion during PSC for development.	S

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SADC PCB

Table A. Risk-log

Implementation Status: 5th

Risk	Risk affecting:	Risk Rating							Variation respect to last rating	
	Outcome / outputs	CEO ED	PIR 1	PIR 2	PIR 3	MTR	PIR 4	PIR 5	Δ	Justification
Lack of national government engagement	All activities	Low - medium					S	S	=	Good response over the year except for 1 country
In-service transformers identified as PCB contaminated equipment	Disposal and Phase out Plans	Medium					M	M	=	Utilities still not committed to replacement of contaminated equipment due to financial constraints/capacity
Electrical utilities, major owners of PCB equipment, do not engage in project (due to high cost of transformer replacement)	Disposal and Phase out Plans	Low					M	M	=	Utilities are engaging good enough but clear that replacement cannot easily happen
Private sector service provider not identified/interested	Disposal and Phase out Plans	Low					L	L	=	International bidding limits the risk
Handling, storage, transport and treatment of PCB wastes leads to environmental releases		Low-Medium					M	L	↓	An expert contractor to be engaged and training undertaken for all role players
Impacts of climate change on the project		Low					L	L	=	only rainy season will affect collection and it may differ country by country
-		-								
Consolidated project risk		-								This section focuses on the variation. The overall rating is discussed in section 2.3.

Table B. Outstanding medium & high risks

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

Risk	Actions decided during the previous reporting instance (PIRt-1, MTR, etc.)	Actions effectively undertaken this reporting period	Additional mitigation measures for the next periods		
			What	When	By whom
In-service transformers identified as PCB contaminated equipment	Attempt to source financial assistance to Utilities to replace in service equipment	Cost benefit analysis undertaken to justify replacement. Attempts to engage world bank PERIP programs to include PCB equipment have not been successful yet	Negotiate with governments to provide securities to utilities	2022	Africa Institute and UNEP
Electrical utilities, major owners of PCB equipment, do not engage in project (due to high cost of transformer replacement)	Follow up with Cost benefit analysis findings to provide incentive for replacement of old and contaminated equipment	Cost benefit analysis undertaken to justify replacement. Attempts to engage utility and SAPP to rethink and plan on decommissioning contaminated equipped continued. Agreement reached to include those in the Phase out plan.	Negotiate with governments to provide securities to utilities	2022	Africa Institute and UNEP

High Risk (H): There is a probability of greater than 75% that **assumptions** may fail to hold or materialize, and/or the project may face high risks.
Significant Risk (S): There is a probability of between 51% and 75% that **assumptions** may fail to hold and/or the project may face substantial risks.
Medium Risk (M): There is a probability of between 26% and 50% that **assumptions** may fail to hold or materialize, and/or the project may face only modest risks.
Low Risk (L): There is a probability of up to 25% that **assumptions** may fail to hold or materialize, and/or the project may face only modest risks.