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**Terminal Evaluation of the UN Environment-GEF Project  
“Demonstration of a Regional Approach to Environmentally Sound  
Management of PCB Liquid Wastes and Transformers and  
Capacitors Containing PCBs”**

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**Evaluation Office of UN Environment  
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## Evaluation Office of UN Environment

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Demonstration of a Regional Approach to Environmentally Sound Management of PCB Liquid Wastes and Transformers and Capacitors Containing PCBs  
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## ABOUT THE EVALUATION<sup>1</sup>

**Joint Evaluation:** No

**Report Language(s):** English

**Evaluation Type:** Terminal Project Evaluations

**Brief Description:** This report is a terminal evaluation of a UN Environment-GEF project implemented between 2010 and 2018. The project's overall development goal was to accelerate the withdrawal of PCB in use, and the environmental sound disposal of PCB waste at the regional level, in an efficient and cost effective manner in compliance with the Stockholm and the Basel Conventions. The project Objective of this intervention is to enhance the collective capacity of the participating countries in planning and implementing their national policies for the environmentally sound management of PCBs and PCB containing equipment in the context of the above-mentioned Conventions.

The evaluation sought to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UN Environment, the GEF and their executing partner the Basel Convention Regional Centre (BCRC) and the relevant agencies of the project participating countries.

**Key words:**

Governance; Project Evaluation; TE; Terminal Evaluation; GEF; GEF Project; Chemicals; Stockholm Convention; PCB; polychlorinated biphenyl's; Africa; AFLDC; Africa Least Developed Countries; LDC; ECOWAS; Economic Commission of West African States

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<sup>1</sup> This data is used to aid the internet search of this report on the Evaluation Office of UN Environment Website

## Project Identification Table

Table 1: Project Summary – GEF ID

UN Environment approval date:	-	Executing Agency:	Basel Convention Regional Centre for French speaking countries in Africa - Dakar (BCRC) and WAPP assisted by ROA	
GEF project ID:	2770	Project type:	Full-size project (GEF)	
GEF Operational Programme #:	GEF 5	Focal Area(s):	POPs	
GEF approval date:	14 October 2010	GEF Strategic Priority:	POPs 1, POPs 3	
<i>Expected start date:</i>	November 2010	<i>Actual start date:</i>	January 2011	
<i>Planned completion date:</i>	April 2016	<i>Actual completion date:</i>	31 March 2018 (legal instrument in force to 30 September 2018)	
<i>Planned project budget at approval:</i>	9,638,942 USD	<i>Actual total expenditures reported as 30 June 2017:</i>	3,363,246 USD (GEF) 3,959,772 USD (Co-fin) Total 7,323,018 USD	
GEF grant allocation:	4,889,399 USD	GEF grant expenditures reported as of 30 June 2017	3,363,246 USD	
Project Preparation Grant - GEF financing:	500,261 USD	Project Preparation Grant - co-financing:	406,000 USD	
<i>Expected Full-Size Project co-financing:</i>	7,400,656 USD (cash) 2,238,286 USD (in-kind)	<i>Secured Full-Size Project co-financing:</i>	1,120,000 USD (cash FFEM) 804,950 USD (Government) 2,015,316 USD (Private sector) 150,000 USD (UN Environment)	
First disbursement:	14 February 2012	Date of financial closure:	Expected September 2018	
No. of revisions:	5	Date of last revision:	26 April 2017	
No. of Steering Committee meetings:	7	Date of last/next Steering Committee meeting:	Last: June 2017	Next: NA
Mid-term Review/ Evaluation ( <i>planned date</i> ):	30 <sup>th</sup> month of the project work plan	Mid-term Review ( <i>actual date</i> ):	Review conducted (2016)	
Terminal Evaluation ( <i>planned date</i> ):	Not later than 6 months after completion of the project	Terminal Evaluation ( <i>actual date</i> ):	April 2018	
Coverage - Countries:	Benin, Burkina Faso, Chad, DR Congo, Cote d'Ivoire, Djibouti, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Senegal, Sao Tome and Principe, Sierra Leone and Togo	Coverage - Region(s):	Africa (ECOWAS)	
Dates of previous project phases:	GEF-supported Enabling Activities to develop National Implementation Plans (NIPs) for Persistent Organic Pollutants Prepared (POPs) have been implemented by UN Environment	Status of future project phases:	At time of writing of this Evaluation, a PIF is under development for a follow up Phase 3	

## Executive Summary

1. This report presents the findings of the Terminal Evaluation of the UN Environment-GEF project: “Demonstration of a Regional Approach to Environmentally Sound management of PCB Liquid Wastes and Transformers and Capacitors Containing PCBs<sup>2</sup>” developed under the Stockholm Convention and funded by the Global Environment Facility (GEF ID 2770) and implemented in the ECOWAS sub-region in Africa. It assesses the implementation and results of this project from 2010 to March 2018.
2. The GEF Implementing Agency for the project was UN Environment and its Economy Division. The Executing Agency was the Basel & Stockholm Convention Regional Centre in Senegal (BSCRC-Senegal). Implementation of this project required 6 Amendments to be put in place; 3 were for no-cost extensions, which effectively extended its duration until March of 2018, or 3 years more than originally planned. Extensions were requested further to experienced delays with start-up and low initial delivery.
3. The overall objective of this Terminal Evaluation was to assess in a systematic and objective manner the performance of the project against the Theory of Change, using the UN Environment Evaluation Office’s evaluation criteria. Performance was assessed in terms of relevance, effectiveness and efficiency, to validate actual and potential results against the expected outputs and outcomes, and determine likeliness of sustainability (impact level).
4. The field visits were conducted during the last quarter of 2017 to Guinea Conakry, Mauritania, Niger and Senegal allowing the Evaluator to meet with stakeholders and to visit project sites (temporary storage sites); data from all relevant sources was triangulated with project documentation and served to establish the evaluation findings, ratings and recommendations. It is also expected that findings and recommendations will be fully picked up and integrated in the new project preparation and development phase (GEF project).
5. The key question of the Terminal Evaluation was whether the project has achieved or is likely to achieve the project objective of “accelerated withdrawal of PCB in use, and environmental sound disposal of PCB waste at the regional level, in an efficient and cost effective manner in compliance with the Stockholm and the Basel Conventions”. The goal of the project as loosely stated in the Project Document is to identify and demonstrate the benefits of a regional approach of the Environmentally Sound Management (ESM) of PCBs. The ultimate impact that the Project seeks to contribute to links directly to the GEF

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<sup>2</sup> Polychlorinated biphenyls (PCBs) - one of the twelve original Persistent Organic Pollutants (POPs) covered by the Stockholm Convention

Global Environmental Benefit: “Risks from POPs to public health and the Environment are reduced”.

### *Evaluation findings*

6. The overall evaluation rating for this project is “**Satisfactory**” and the ratings for the evaluation criteria are detailed in the respective tables presented in the complete report; these are summarized below:
7. The strategic relevance of the project was found to be highly satisfactory; it is aligned with the mandate, Medium-Term Strategy and thematic priorities of UN Environment, with the Stockholm and Basel Conventions, with regional, sub-regional and national environmental priorities; with target group and beneficiaries’ needs and priorities; with GEF strategic priorities and is complementary to existing interventions. In addition, it also shows alignment with UN Environment capacity building and South-South Cooperation policies.
8. The project was designed through a participatory process and the meetings organized served to steer project preparation, to ensure that it met national priorities, and to endorse its interim products. However assessment of project design did reveal a number of weaknesses, in addition to strengths. Overall the project design was rated as Moderately Satisfactory, given the significant weaknesses, including but not limited to: Project Preparation; Intended results and Causality; Logical Framework and Monitoring; Partnerships; and Sustainability / Replication and Catalytic Effects.
9. Although different external and country specific conditions occurred during the period of implementation of this Project, in general this Criteria is not considered to have had a significant negative effect on delivery of the expected Outputs. This said, a number of countries did experience significant adverse impacts: Guinea where there were outbreaks of Ebola virus in 2014 and 2015 and subsequently travel restrictions and avoidance of meetings; and, further to civil unrest and the resultant heightened security, the Ivory Coast, and in the north of Mali, which impacted implementation between 2012 and 2015. Although Chad, Djibouti, Morocco and Democratic Republic of Congo never fully embarked on the Project, these also experienced civil unrest during the period of implementation. Nature of external context was accordingly rated as Moderately Favourable.
10. Effectiveness was assessed on the delivery of the Outputs as at 31 December 2017 (reconstructed based on project documentation), on the achievement of Outcomes and, the likelihood of impact. Overall, Effectiveness was rated Satisfactory, and Likelihood of Impact was rated as Likely.
11. The start-up of Project activities was slow due to external circumstances. There was a delay of 2 years in negotiating the Agreement with the FFEM, impacting delivery of the first tranche. The non-participation of West African Power Pool (WAPP) in the project as

second Execution Agency and the fact that Mali and the Ivory Coast experienced internal violence further complicated the start-up. In addition, the fact that, between 2011 and 2013, many countries in the region traversed an electricity generation crisis slowed down the project start and in early 2013, the project was seriously undermined by two events:

- The decision by the African Development Bank (ADB) to cancel the funding which had been pledged during the project preparation (2 Mio USD)<sup>3</sup>; and,
- The decision of the government of Ivory Coast to ban all imports of chemicals wastes into its territory, de facto annulling the foreseen construction of a PCB treatment plan in Abidjan and forcing a radical change of plans to address Phase 2.

12. This situation required deployment of adaptive management practices and forced the project team and partners to think of alternative viable options to deliver results in support of objectives of Phase 2. Ultimately the agreed upon option as regards destruction was that of setting-up temporary storage sites in every participating country, where transformers could be drained of oils, and conditioning operations could take place, prior to shipment to Europe for destruction. The funding shortage also required measures be put in place to elicit stronger commitment from electrical utilities, since these would have to provide technical support for Environmentally Sound Management, inventories and for the storage sites (in-kind co-financing).
13. As a result of these interventions, and although at time of evaluation much remains to be done, overall significant qualitative and quantitative results for all Direct Outputs were documented; Inventories, Environmentally Sound Management (ESM), Temporary Storage Sites, Awareness Raising, Databases, and Destruction. Overall delivery of Outputs was assessed as Satisfactory.
14. As regards achievement of Direct Outcomes, rated overall as Satisfactory, evidence indicates that significant progress has been made towards adoption of a harmonized regulatory system, and that this would not have been possible without the support of the GEF funded intervention implemented by UN Environment. This is a major milestone as it sets the stage for all future Stockholm Convention related interventions and indicates satisfactory sustainability of the project.
15. One can as well argue that without this first series of successful Outputs, there would likely be much less uptake for what are, at this stage, essentially “voluntary” activities in support of Environmentally Sound Management systems, or for supporting the work required to complete the inventories (in-kind). As well, interview data indicates that despite country specific difficulties<sup>4</sup>, the outcome of harmonized regulatory systems can be considered as completed / expected to be completed at national level in most countries in the course of 2018.

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<sup>3</sup> Reportedly despite best efforts from the Implementing agency and executing agency

<sup>4</sup> Political instability, Ebola outbreak, Ministerial level changes (one country changed Ministers 5 times in as many years)



16. As regards mechanisms for decommissioning operational equipment, it is important to note that electrical companies and other transformer owners delay the replacement of these old transformers - whether PCB contaminated or not - as they require high investments, which, very often, are not in line with power generation and electrification priorities. In addition these are also generally well beyond the economic capacities of the majority, if not all, of these companies. Without access to additional sources of financing, countries and their respective utilities are considered to be highly unlikely to be able to decommission transformers in service, even if these are suspected of containing PCBs. In this sense there is both an opportunity and a challenge on the horizon as in a number of cases, and as was rightly pointed out in the Project Document, as energy demand grows, there is a need to modernize the power grids. This will lead to decommissioning of large numbers of equipment and in turn will require that all transformers on the soon to be obsolete grids be disposed of.
17. High levels of awareness have been achieved, and support environmentally sound management of chemicals. Overall the Project is described as a success, as “many things changed in the participating countries”, and “utilities became aware of their responsibilities and roles”, and destruction of transformers and PCB oils did take place and was in general extensively picked up by the media.
18. Awareness was also raised amongst the population, who in their great majority prior to this ignored the existence of PCBs. The cross-fertilization mechanisms established have endured outside of the Project and there have reportedly been numerous occasions where technicians and managers have continued to exchange information with utilities from the other participating countries, and “this continues to this day”.
19. As regards likelihood of impact, the direct Outcomes most important to the attainment of intermediate states have mostly been achieved: regulatory systems expected to be adopted, ESM capacity built and utilized by governments and in particular their energy providers (utilities), decommissioning and destruction of PCBs, and this with the awareness and support of the population. The Project has delivered substantial results, and indications are that most Outcomes will be reached or are likely to be achieved in the near future. Finally, as the Project has achieved some documented changes in reducing releases of PCBs, and is considered to be aligning itself to contribute to the reduction of environmental and health risks, the likelihood of impact is assessed, as per the Evaluation Office guidances, as “Likely”.
20. Financial management was rated as Satisfactory as no deficiencies were identified as regards completeness of financial information, nor of communication problems between finance and project management staff. Evidence suggests that at least since 2015 (with the appointment of the current Task Manager) there was a *strong awareness* of overall project progress when financial disbursements are made; and there was *regular / frequent* contact between the key stakeholders within the implementing agency. Evidence also suggests that although prior to 2015 financial issues might only have been addressed

retrospectively when identified by senior management/staff external to the project team, thereafter they were raised and resolved proactively.

21. Regarding cost effectiveness or costliness, no major concerns were identified, and it is considered that although to date the project has not delivered all of the expected results, those achieved have been delivered at a reasonable cost. The project did face severe delays in its implementation and did not produce results within the initial time frame available (i.e. by April 2015), however it is considered that there are mitigating factors that partially account for this; including a series of unforeseeable events, which effectively derailed project implementation and have contributed to a 3-year delay, and to relatively low operational efficiency. Due to the above, Efficiency is rated as Moderately Unsatisfactory.
22. The M&E for this Project was designed according to both the GEF and UN Environment's standard procedures for monitoring and evaluation in place at the time of project design (2009-2010). The logframe included "objectively verifiable indicators of achievements, sources and means of verification for the Project outcomes and outputs, and the timeframe for monitoring activities" were specified in the Projects' Monitoring and Evaluation Plans.
23. Monitoring systems were put in place at the level of the Executing Agency, in line with its standards and evidence suggests that these allowed the person responsible for monitoring progress against indicators to track results and progress toward project objectives.
24. Monitoring of project progress is considered to have been adequate, given most indicators were at output level and easily tracked, however monitoring of performance (in terms of achievement of project outcomes and the overall project objective) was unavailable given inadequacy of indicators. As part of the monitoring mechanisms, the Project Steering Committee was established and met 8 times during the life of the Project. The steering committee was effective at reviewing project performance and making decisions for future work plans and used in particular the Steering Committee Meetings to address issues and implement solutions, as required. Overall Monitoring and Reporting is assessed as Satisfactory.
25. Socio-political sustainability was rated as Highly Likely for all components; Financial sustainability was rated as Likely for all components; Institutional sustainability was rated as Moderately Likely. Overall sustainability for the project was rated as Likely.

**Main conclusions and recommendations**

<b>Conclusion 1</b>	<b>Moving forward</b>
	<b>Recommendation 1:</b>
The Project has delivered results, but these are far from what was initially planned for, or required to fully address the elimination of PCB'S	Phase 3 of the Project should be urgently finalized and implemented, this will ensure that the momentum gained is built upon, and that the large remaining stockpiles of PCBs (in equipment and as oils) are effectively disposed of
<b>Contributing Conclusions</b>	<b>Supportive recommendations:</b>
There is a risk that without continued support, countries will not be able to comply with their obligations under the Stockholm Convention	Additional interventions should target completion of inventories, geo-localization of equipment, continued building of capacities to address Stockholm Convention requirements, and access to financing for eventual disposal of PCB wastes
Trainings needs have not fully been met; successes should be furthered, to ensure long lasting results. What has been achieved is appreciated, but needs remain. Trainings should be more in depth, so that information can be fully comprehended and mastered, in support of replication	The success of future interventions requires that reproducible training capacities be firmly established, ensuring results from this intervention are long lasting
<b>Conclusion 2</b>	<b>Learning for success</b>
	<b>Recommendation 2:</b>
One size fits all regional approach has merits, but has created high levels of dissatisfaction	National interventions, under a regional overarching umbrella, should always strive to closely match the individual client countries priorities, and most importantly, needs.
<b>Contributing Conclusions</b>	<b>Supportive recommendations:</b>
Even in a regional approach, efforts must be made to take into account and reflect on the realities of individual countries	There are advantages to the regional approach, such as facilitation of cross-fertilization and South-South cooperation, however challenges inherent to individual country realities must be at the forefront of any intervention

*The main lessons learned are:*

1. Opportunities are easy to miss: decommissioned transformers that are not moved to storage sites rapidly will tend to vanish and estimates of stockpiles may in the end be lower than initially estimated;
2. Access to sources of financing – countries and in particular their electricity generators and providers (utilities) are highly unlikely to decommission functional equipment, even if they are known to contain PCBs, without a strong incentive to do so (grants, subsidies, loans);
3. Timing of interventions is essential to ensure success, for example awareness raising activities, generally the last component before management, should not be implemented sequentially. Raising awareness before, or in parallel, while data collection takes place contributes to success of interventions;
4. Timely use of adaptive management can significantly contribute to redressing a project, notwithstanding the severity of unforeseen events affecting its implementation;
5. Awareness has been raised, but to ensure good practices continue, countries and utilities must support the purchase and use of protective gear when handling PCBs

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## List of acronyms and abbreviations

UN	United Nations
ASP	Africa Stockpile Program
AU	African Union
BAD	Banque Africaine de Développement – African Development bank
BAT	Best Available Techniques
BEP	Best Environmental Practices
BID	Banque Islamique de Développement – Islamic Development Bank
BCRC	Basel Convention Regional Centre
CEDEAO	Communauté Economique des Etats de l’Afrique de l’Ouest
EA	Executing Agency
ECOWAS	Economic Community of West African States
EOU	Evaluation and Oversight Unit (of UNEP)
ESM	Environmentally Sound Management
FFEM	Fonds Français pour l’Environnement Mondial
GEF	Global Environment Facility
M&E	Monitoring and Evaluation
NCC	National Coordination Committee
NEPAD	New Partnership for African Development
NGO	Non Government Organization
NIP	National Implementation Plan
PCB	Poly chlorinated Biphenyl
PIF	Project Identification Format
PIR	Project Implementation Review
PMU	Project Management Unit
POP	Persistent Organic Pollutant
PPE	Personal Protection Equipment
PPG	Project Preparation Grant
PRTR	Pollutant Release and Transport Register
ROA	Regional Office for Africa
SBC	Secretariat of the Basel Convention
SC	Stockholm Convention
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNE	United Nations Environment
UPOPs	Unintentional POPs
WAPP	West African Power Pool
WB	World Bank

## 1 Introduction

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1. This report presents the findings of the Terminal Evaluation (TE) of the UN Environment's intervention in the ECOWAS sub-region of Africa entitled: "Demonstration of a regional approach to environmentally sound management of PCB liquid wastes and transformers and capacitors containing PCBs" developed under the Stockholm Convention and funded by the Global Environment Facility (GEF). The overall budget for the Project at approval was of 9,638,942 USD and included a GEF Grant allocation of 4,889,399 USD. At time of writing of this Evaluation, a PIF for submission to the GEF was being prepared to ensure the results of this intervention are built on and replicated.
6. The evaluation was conducted by Mr. Cristóbal Vignal, acting as International Evaluation Consultant, under the overall supervision and with the support of the UN Environment Evaluation Office.
7. The key question of the Terminal Evaluation was whether the project has achieved or is likely to achieve the project objective of "accelerated withdrawal of PCB in use, and environmental sound disposal of PCB waste at the regional level, in an efficient and cost effective manner in compliance with the Stockholm and the Basel Conventions". The goal of the project as loosely stated in the Project Document is to identify and demonstrate the benefits of a regional approach of the Environmentally Sound Management (ESM) of PCBs.

### 1.1 Institutional Context of the Project

8. The project was approved for implementation by the GEF on 14 October 2010 and began in November 2010. The duration of the project was of 60 months, although the GEF closed it after 54 months<sup>5</sup>; the project received 3 no cost extensions and ended on 31 March 2018 (legal instrument remains in force until 30 September 2018 to allow for administrative closure). The final Amendment (no.5) to the Project Cooperation Agreement between UN Environment and the Executing Agency, the Basel & Stockholm Convention Regional Centre in Senegal (BSCRC-Senegal – in French CRCB - Centre Regional de la Convention de Bale pour les pays Francophones d'Afrique) revised the completion date to "provide for sufficient reporting period after completion, and reallocate un-utilized funds between the various budget lines"; this Amendment was signed on 22 November 2017 and will remain in force until 30 September 2018 unless terminated earlier.
9. The GEF Implementing Agency for the project was UN Environment and its Economy Division. The co-Executing Agencies were the Basel & Stockholm Convention Regional Centre in Senegal (BSCRC-Senegal) and the West Africa Power Pool (WAPP). However WAPP did not participate, which amongst others deprived the project of technical

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<sup>5</sup> It is listed in the GEF project database as having closed on 01 April 2015



backstopping and support<sup>6</sup>. This decision was reportedly in line with WAPP policies as the project only covered francophone countries, whilst the agency caters to all of West African partners<sup>7</sup>.

10. The project management unit (PMU) was established and was composed of representatives of UN Environment, Secretariat of the Basel Convention (SBC), BCRC, the Regional Office for Africa (ROA), and participating countries as shown in table 1 below. The PMU was mandated to recruit and supervise national and international experts and subcontractors as necessary to deliver project outputs.

**Table 1 PMU composition and responsibilities**

UN Environment	Implementing Agency
Regional Office for Africa (ROA)	Co-executing agency
Basel and Stockholm Convention Regional Centre (BSCRC)	Executing agency and Project coordinator
Participant countries	1 representative per country
	1 representative of the electricity company per country

## 1.2 Purpose of the Evaluation and Key Intended Audience

11. The evaluation was undertaken to verify the performance of the above-mentioned project in terms of relevance, effectiveness and efficiency, hence allowing the Evaluator to assess and validate actual and potential results against the expected outputs and outcomes, and determine their likeliness of sustainability (impact level).
12. The scope of this Terminal Evaluation was from 2010 to March 2018, and the evaluation field missions took place in the last quarter of 2017. The field visits allowed the Evaluator to meet with relevant stakeholders and to visit relevant project sites (temporary storage sites).
13. The key intended audience for the evaluation findings includes UN Environment staff, as well as all key project stakeholders (both at the level of the countries, as well as other international partners and agencies). In particular it is expected that these will support the development of the PIF currently under preparation for submission to the GEF. It is also expected that findings and recommendations will be fully picked up and integrated in the new project development phase, once its PIF is approved by the GEF.

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<sup>6</sup> WAPP was expected to provide 1 technical expert to cover all activities, 1 regional coordinator for the inventories, and 1 technical expert for inventories and transport

<sup>7</sup> Interview data

## 2 Evaluation Methods

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### 2.1 Theory of Change at Evaluation

14. The Theory of Change (TOC) at Evaluation was developed in the Inception Report and was peer reviewed<sup>8</sup>. Changes in the design of the project that were approved throughout its duration have been included. These changes were identified from review of the Steering Committee minutes, annual Project Implementation Reviews (PIR), interviews with staff and relevant stakeholders. The modifications also reflect the results of the tests of the project logic during the evaluation. The Theory of Change at Evaluation is discussed in more depth in Section 4.

### 2.2 Data Collection

#### 2.2.1 Description of Evaluation methods and Information Sources

15. The Terminal Evaluation (TE) was conducted in accordance with UN Environment Evaluation Policy and the UN Environment Programme Manual. It was carried out as an independent in-depth evaluation using a participatory approach; all key parties and stakeholders associated with the project were kept informed and regularly consulted throughout the evaluation.
16. In order to determine project achievements against the expected Outputs, Outcomes and Impacts, the Evaluator used different methods to ensure that data gathering and analysis delivered evidence-based qualitative and quantitative information, obtained from a wide range of sources. These included desk review of studies and literature, individual in-depth interviews (face-to-face, Skype and/or telephone depending on quality of the Internet and available bandwidth), e-mails, and direct observation. This approach enabled the Evaluator to assess causality through qualitative and quantitative means and to understand the reasons for which certain results were achieved, or not, and to triangulate information for higher reliability of findings.
17. The methodology included interviews with project managers at UN Environment HQ, staff and in-country stakeholders, including beneficiaries and government representatives. In addition, initial interviews were conducted with the current UN Environment Task Manager and other relevant staff members in the context of the 6th and last Regional Steering Committee meeting held in June 2017 in Nairobi, prior to the evaluation missions. This served to obtain complementary information on project design and implementation. These interviews were semi-structured and sought to clarify the origins of the project, inputs from stakeholders, institutional arrangements for implementation, achieved and expected results, strengths and weaknesses, difficulties encountered and missed opportunities.
18. The documentation review was carried out during June of 2017 to March of 2018 and included project related documents, the mid-term evaluations of the Project (conducted in 2016), monitoring reports, and also contextual documents on

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<sup>8</sup> This was peer reviewed by UN Environment Evaluation Office at the time of approval of the Inception Report

Government policies, as well as any others considered pertinent by the Evaluator<sup>9</sup>. A list of information and data sources, as well as that of interviewed stakeholders interviewed in the course of preparation of this Terminal Evaluation is presented as Annex II.

19. The UN Environment Evaluation Office directly contracted the International Evaluation Consultant whose tasks were specified in the job description attached to the Evaluation ToRs (Annex I). The Evaluator was not directly involved in the design and/or implementation of the project.

### 2.2.2 Selection Criteria and questions

20. As it was not possible to conduct field missions to interview representatives in all 9<sup>10</sup> participating countries, the Evaluator visited a sample of 4 of the participating countries previously identified and agreed to by UN Environment during the evaluation inception stage. These missions were conducted during the last quarter of 2017 to Guinea Conakry, Mauritania, Niger and Senegal.
21. The Inception phase of the evaluation delivered an agreed upon methodology, and a set of questions, to assess project performance, and prior to the missions, the Evaluator identified the types of stakeholders to be interviewed (public sector, private sector, civil society organizations, academia), based on their roles. In particular he sought to interview direct beneficiaries of the project including those involved in project management, recipients of training at the regional and national level, and those with institutional responsibilities related to the project (e.g. GEF Focal Points). The interviewees were identified with the support of the national Focal Points and the Executing Agency.
22. The stakeholders to be interviewed were selected on the basis of their role in the project; the number of female and male interviewees in each of the countries is shown in Annex II.

### 2.2.3 Data Verification

23. The interviews allowed new lines of questioning to be followed if/when necessary, particularly with regard to reconstructing the history of the project (from the stakeholders perspectives). The Evaluator conducted the interviews and notes taken and analysis were triangulated against documentary evidence. While maintaining the independence of the evaluation, the approach was participatory and open in order to facilitate cordial and constructive dialogue with all stakeholders.

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<sup>9</sup> See Annex I for a list of relevant documents

<sup>10</sup> 14 countries were initially expected to participate

## 3 The Project

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### 3.1 Context

24. The Stockholm Convention recognizes that POPs pose a major and increasing threat to human health and the environment. These pollutants possess toxic properties, resist degradation, bio-accumulate and are transported through air, water and migratory species, across international boundaries and deposited far from their place of release, where they accumulate in terrestrial and aquatic ecosystems<sup>11</sup>.
25. It is also generally recognized that although the countries in the ECOWAS region have completed their Stockholm Convention National Implementation Plans (NIPs), their capacity both in terms of financial and human resources is simply not in place to maintain the momentum and ensure that they continue to actively engage in the elimination of POPs without external support.
26. It is as well understood that there are in the region significant amounts of PCBs, which if not properly managed, have the potential to contaminate terrestrial and aquatic ecosystems. Growing evidence of PCB contamination includes wildlife (e.g. fish), sediment and water bodies as a result of past use, spills, leakage, accidents and bad practices (recycling of contaminated transformers or open uses of PCB oils in the informal sector). PCB contamination of African waters is of particular concern because of the heavy reliance of the general population on fish as a main source of protein (with higher per capita consumption than in developing nations) as well as for commercial reasons.
27. This is of significant national, as well as global concern as PCB pollution originating in one nation can enter territorial waters of its neighbors (e.g., from spills or leaks from inadequate storage facilities/containers, shipping locations and during transport), which in turn can enter the global ecosystem. As a result, exposure of wildlife, in particular fish, to PCBs is known to have occurred, but at time of preparation of the project only limited monitoring of PCBs had been undertaken in francophone Africa in humans, wildlife and fish, sediment, soil and water and, only a few countries (Benin, Cameroon and Côte d'Ivoire) had limited data on PCBs in marine fish (UNEP 2003)<sup>12</sup>.
28. Exposure of African populations to PCB is of particular concern as there are, as a result of ignorance and low to non-existent awareness<sup>13</sup>, numerous reported cases of direct exposure to PCB. This is mainly from re-use of PCB containing oils in soaps and "whitening" creams, but PCB containing oils are also known to have been sold on local markets and/or used as lubricant; a source of emissions of unintentional emissions of POP's (known as UPOPS or unintentional POPs, which include dioxins and furans) if used for example in combustion engines. There are also cases of PCB containing oils having been used for cooking purposes.

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<sup>11</sup> Project Document, and other sources including AFLDC Evaluation

<sup>12</sup> UNEP 2003. Regionally-based Assessment of Persistent Toxic Substances

<sup>13</sup> Despite of the efforts to raise awareness undertaken during NIP enabling activities

29. The project intervention is moreover supported by the fact that preliminary inventories carried out during NIP enabling activities<sup>14</sup> were based exclusively on available records and the data found on the transformer identification plates and, where chemical testing had occurred, only covered part of the existing population. This resulted in data being available for roughly less than 50% of the transformer population. A compilation and analysis<sup>15</sup> of these limited national inventories was carried out during the preparatory phase of the project, as well as limited pilot inventory projects through bilateral/multilateral cooperation activities. Although these have helped to define PCB national profiles, it is still far from complete.
30. The assessment of the national inventories revealed that more than 80% of the existing transformers are owned by electrical utilities noting that these and other owners lack the means to apply Environmentally Sound Management (ESM) practices to PCB equipment in service, in storage or out of service. For instance, there is no systematic screening to identify PCB in transformers or equipment before maintenance or repair of such equipment. Electrical fluids are also reused without prior screening for PCBs resulting in cross contamination of mineral dielectric oils by PCBs during maintenance and repair activities of transformers; this is considered a major problem in these countries and is critical as potentially the transformer population could get cross contaminated thereby increasing the total amount of PCB contaminated equipment and oil.
31. Finally, the lack of proper legislation does not facilitate control for the presence of PCBs in newly acquired or imported transformers or equipment (new or second hand) and although, some countries do import PCB free equipment (certificate from manufacturer or supplier), in other cases it has been found that recently manufactured transformers nevertheless contained PCBs. It is therefore necessary that countries of the region develop and institute proper policies and mechanisms to strictly control the importation of transformers and any other equipment that could potentially contain PCBs.

### 3.2 Objectives and Components

32. The specific objectives of the project as described in the project document were threefold:
  - To demonstrate the advantages of the development of a regional approach in the field of legal infrastructure, training and cost effective technical and technological capital cost planning;
  - To adequately advise the participating countries in developing and initially implementing their individual national strategy for the ESM of PCBs and investigate possible cross linkages with the national strategies for other POPs waste (obsolete pesticides) as regards final disposal;
  - To reduce the costs associated with the treatment of contaminated equipment, including from discarded or abandoned equipment, and promote early action on implementation through building up of a regional mechanism for the ESM of

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<sup>14</sup> Prepared as part of GEF-supported enabling activities to develop National Implementation Plans for the Stockholm Convention

<sup>15</sup> NDOUR M & GUIBERT Y. 2007 'Rapport consolidé sur la situation des inventaires'. Unpublished report of the PDF-B phase of the project

liquid PCB waste and PCB containing equipment, by starting with a reduced number of countries.

33. The following components outlined the proposed approach:

- Component 1: Harmonized regional regulatory infrastructure and financial mechanism
- Component 2: Enhanced regional capacity for ESM of PCB containing equipment
- Component 3: Regional mechanism for ESM of PCBs and equipment including the decontamination of PCB containing equipment
- Component 4: To develop and implement a strategy for the diffusion of information concerning the demonstration of the benefits of a regional approach for the ESM of PCBs – Stakeholder awareness
- Component 5: Project Management

34. The project was designed for implementation in 2 phases, the first corresponding to enabling activities aimed at putting in place the regulatory, administrative and technical framework for management of PCBs; the second phase for elimination activities covered operational activities in support of management of PCBs.

35. Phase 1 lasting 18 months included “soft” activities covering training and capacity building on ESM of PCBs, as well as development of model regulations. These activities were to be rolled out in a limited number of “pilot countries” selected during the preparatory phase (3 countries for the legal component, and one pilot country per each demonstration project) prior to their replication in all other countries of the project. The selected pilot project countries were:

- Cote d’Ivoire, Togo and Morocco to develop a harmonized draft regulation for enactment at the national level during Phase One (Component 1)
- Burkina Faso for a pilot project on ESM of PCBs in the electrical companies that hold more than 80% of transformers (Component 2)
- Togo to develop system for complete PCB inventory and management (Component 2)
- Mali to set up a unit for dismantling and storage of PCB contaminated equipment (Component 3)
- Senegal or Cote d’Ivoire to put in place a mobile treatment unit for PCB decontamination (Component 3). The selection of the final country to be done during the early stages of the project.
- Benin to disseminate results and lessons learnt to stakeholders (Component 4)

36. Phase 2 lasting 3 years was based on results of Phase 1 and included “hard” activities such as national regulation enhancements, a regional mechanism for the complete ESM of PCBs, equipment and wastes, as well as awareness raising activities.

### 3.3 Stakeholders

37. The countries having committed, through ratification of the Stockholm, Basel and Bamako Conventions, to soundly manage dangerous chemicals and hazardous wastes at national, regional and global levels supported a stakeholder identification and analysis, in the project document, which focused mainly on institutional stakeholders considered to be the primary beneficiaries and actors in the project. It argued that:

- Coordinated implementation of the Basel Convention and the Stockholm Convention (both at the national institutional level and international level) was highlighted as a key policy instrument on the occasion of the Regional Workshop for West Africa for the coordinated implementation of the chemicals conventions, held in Ouagadougou, February 2002;
- The Secretariat of the Basel Convention (SBC) was committed to contributing to the project, through delivery of technical and legal expertise, project support and participation of staff, consultations with Basel Convention Regional Centre (BCRC)-Dakar and the countries concerned, and delivery of training material to experts, sharing of experience from pilot national projects and on-going regional programmes;
- BCRC-Dakar was committed to assisting in the coordination of project activities, including management capacity from within its institution in Dakar, utilizing its communication facilities (web-site, newsletter, access to local and regional media) and its network with the focal points to the Basel Convention and the Stockholm Convention, as well as with the electricity companies, industry, NGOs and the academic sector in countries in the region<sup>16</sup>;
- UN Environment committed to implementing the New Partnership for Africa's Development (NEPAD) Environment Action Plan, and was implementing a GEF Medium Size Project (MSP) on capacity building for NEPAD, arguing the MSP could not address the capacity building needs on the issues the project proposed to handle<sup>17</sup>; and,
- The West African Power Pool (WAPP) was a key and strategic stakeholder of this project as they held more than 80% of the transformers of the region<sup>18</sup>.

38. The analysis undertaken below includes secondary beneficiaries and actors impacted by the project. The main stakeholder groupings have been divided into International and National Stakeholders. The international stakeholders include staff of Implementing Agencies, Executing Agencies, Collaborating projects, Regional Economic Communities, Co-financing institutions and International Civil Society Organizations (CSOs). The national stakeholders include staff from National Focal Point, NIP implementation committee, Government Ministries (at various levels), national Civil Society Organizations, Private Sector, Media, Education, users of hazardous chemicals, and the Public.

39. Gender and marginalized groups were not a specific focus of the project although risk of exposure to PCB is high in vulnerable communities (including farmers<sup>19</sup>), with risks to the health of females, children and unborn infants being generally higher than they are to the health of males (with the exception of untrained technicians involved in the practice of recycling of oils and metal parts of retired transformers).

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<sup>16</sup> In addition to the project benefitting from the political support of the Government of Senegal as host Government for the BCRC-Dakar and the secretariat of the NEPAD Environment Action Plan also in Dakar

<sup>17</sup> Offering to maintain close linkages with the capacity building related activities under the NEPAD Environment Initiative

<sup>18</sup> Arguing as well WAPP had shown strong support to this project and were committed to implement the components that were in line with their missions of supporting "the effective programming for enforcing compliance with mandatory standards".

<sup>19</sup> As mentioned earlier, these oils are not only sold in the informal sector in creams and other "medical" products, but also for open uses like solvents for pesticides and fuel for cooking or for lamps, constituting direct exposure routes for human exposure

**Table 2 Stakeholder Analysis**

Stakeholder	Level of Interest	Level of Influence <sup>20</sup>	Importance as source of information for Evaluation	Focal area for questions
<b>International and Regional Stakeholders</b>				
<b><i>UN Environment Staff</i></b>				
Project Developer	H	H	M	Assessment of design of projects
Task Manager	H	H	H	All aspects
<b><i>Executing Agency Staff</i></b>				
Project Coordinator	H	H	H	All aspects
Finance officers	H	M	H	Efficiency aspects/financial management
Admin officers	H	M	M	Efficiency aspects
Consultants	H	H	M	Effectiveness aspects
<b><i>Co-financing institutions</i></b>	M	L	M	
UNEP-ROA	H	H	H	
WAPP	H	H	H	
AFD	M	L	M	
Countries	H	H	H	Provision of co-funding is an indication of commitment and sustainability
UNEP Chemicals (Kemi)	M	M	M	
ECOWAS	L	L	H	Sustainability/ regional harmonisation
BCRC	H	H	H	All aspects
Green Cross CH	H	M	M	All aspects
<b>National stakeholders</b>				
<b><i>Government</i></b>				
POPs focal points	H	H	H	All aspects of national implementation
Members of NIP coordinating committee	M	M	M	Long-term role and assessment of current capacity for NIP implementation
<b><i>Ministry of Environment</i></b>				
Minister	M	H	H	Assessment of high-level commitment
Enforcement Staff	H	M	H	Effectiveness of trickle-down training
Ministry of Justice	M	H	H	Status of implementation of Legislative framework and economic instruments
Ministry of Finance	M	M	H	Status of sustainable funding for enforcement
Customs	M	M	H	Capacity for enforcement
Ministry of Health	M	M	M	Assess benefit of trainings
Ministry of Education	M	M	M	Status of awareness-raising in Education
<b><i>National Civil Society Organizations</i></b>				
Representatives of Vulnerable communities	L?	L	H	Effectiveness of awareness raising

<sup>20</sup> This is considered to be either High (H); Moderate (M); or, Low (L)



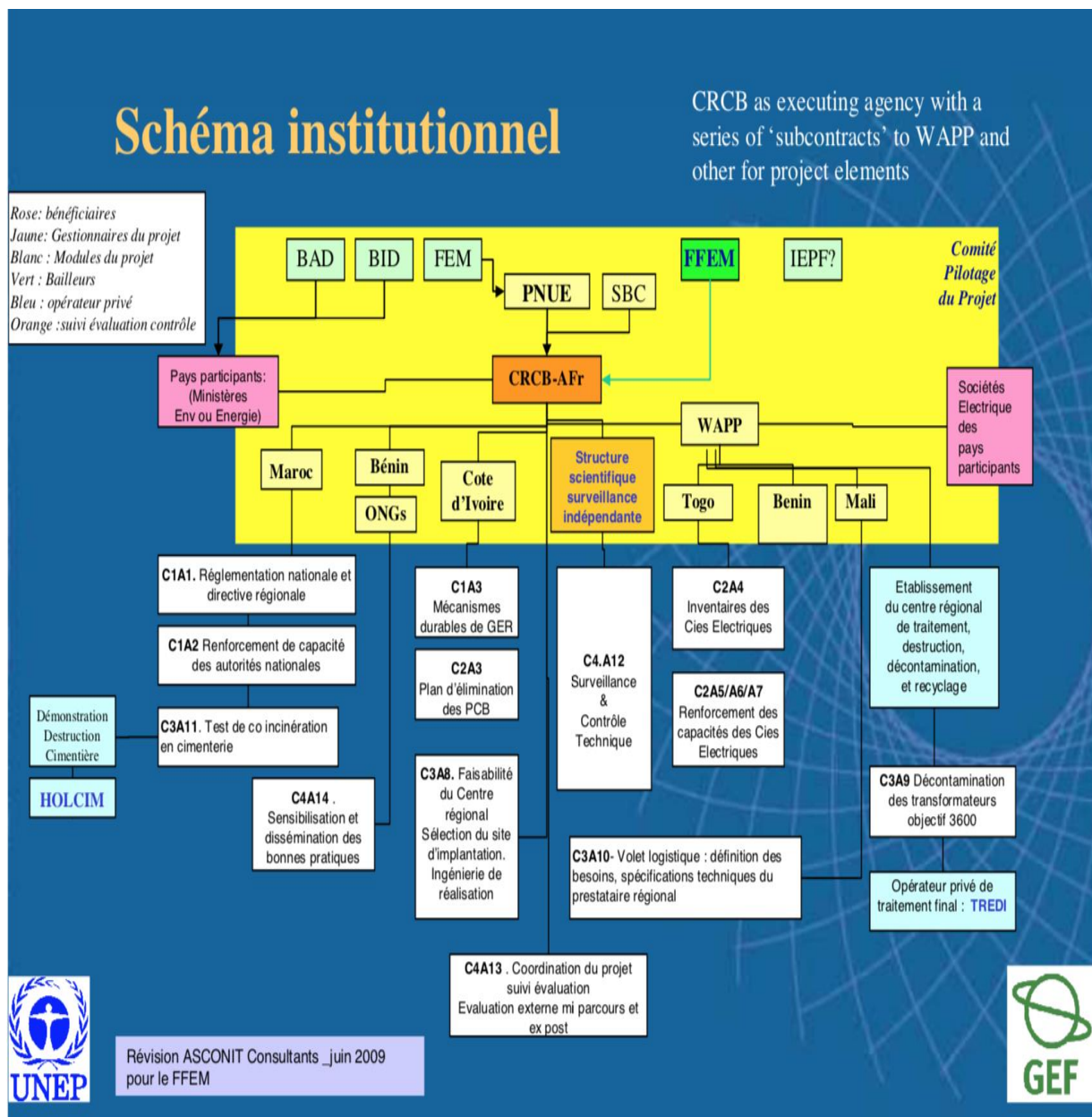
Stakeholder	Level of Interest	Level of Influence <sup>20</sup>	Importance as source of information for Evaluation	Focal area for questions
<b>Private Sector</b>				
Electrical Industry (PCB)	M	L	M	Understand change in behaviour as a result of the project
Waste industry	M	L	M	Change in capacity to deal with PCB wastes
<b>Media Channels</b>				
Press, radio and TV	M	M	H	Awareness of PCB and effectiveness of campaigns

### 3.4 Project Implementation Structure and Partners

40. UN Environment and its Economy Division in particular, as the GEF Implementing Agency (IA), was responsible for overall project supervision to ensure consistency with GEF and UN Environment, policies and procedures, and to provide guidance on linkages with related UN Environment, and GEF-funded activities. In addition to its role within the Steering Committee, UN Environment was to ensure timeliness, quality and fiduciary standards in project delivery.
41. The Project Steering Committee was set up to direct and oversee the project implementation and was to be composed of representatives from UN Environment, secretariat of the Basel Convention, Basel Convention Regional Centre for French-speaking countries in Africa (BCRC-Dakar), the other GEF implementing agencies in charge of the implementation of the NIPs in the countries covered (UNIDO, WB and UNDP), ROA, WAPP, and selected members of the representatives from the participating countries (focal points of the Stockholm Convention, focal points of the Basel Convention), as well as a representative from Fonds Français pour l'Environnement Mondial (FFEM) and any other financial contributors, including from industry. As deemed appropriate by the Steering Committee, the Steering Committee could invite the managers of other related projects.
42. A regional coordinator was identified within the Basel Convention Regional Centre for French-speaking countries in Africa based in Dakar. The regional coordinator, supported by the Regional Office for Africa (ROA), led the implementation of the project, prepared necessary documentation for the Steering Committee meetings, and liaised with all stakeholders, including Governments and the national project coordinators, industry, and NGOs.
43. The coordination mechanism at the national level was to be assured through national coordinating committees. These structures were already in place for the implementation of the Stockholm Convention, Rotterdam Convention and the Basel Convention (chemicals and waste) and were to be set up in countries where they didn't exist yet (Guinea Bissau). The national coordinating committees (NCC) would comprise representatives of relevant government entities (including official Focal Points and Competent and/or Designated National Authorities for the Stockholm Convention, Basel Convention and Rotterdam Convention), industry, public utilities, and interested non-governmental organizations such as environmental, public health and women's groups. A national coordinator for the purpose of the project was to be

nominated by the Focal point (Government institution) to the Basel Convention in close consultation with the SBC.

44. An independent authority was to be selected and contracted to monitor and oversee the project activities to ensure that they were undertaken as planned in the project and in strict conformity with existing rules and regulations set to protect human health and the environment.



45. The project Steering Committee met on 8 occasions between 2011 and 2017. The 1st Meeting took place in Dakar, in parallel to the Inception Meeting in February 2011; the 2nd and 3rd Meetings took place in Abidjan, respectively in May 2012 and July 2013; the 4th Meeting took place in Ouagadougou in June 2014; the 5th Steering Committee Meeting took place in Lomé in June 2015; the 6th in January 2016 in Bamako; the 7th and 8th Meetings took place in Nairobi, respectively in July 2016 and June 2017.

46. Prior to the 3rd Meeting, the FFEM, the BSCRC and Tredi met in January 2013 to validate the proposed business plan and the associated financial protocol for the

disposal phase of the project. The 3rd Steering Committee Meeting's main objective was to validate the proposed business plan of the regional treatment centre as well as the conditions that will have to be put in place to gain access to decommissioning services. . It is during this meeting that the Ivory Coast confirmed that it would not be able to host the treatment centre, further to which a new business plan was developed including: hub storage in each country; training and supervision by Tredi for packing and national transport; and administrative assistance for PCB exports. A meeting with the representatives of utilities also took place, organized by the BSCRC with the support of the Ivorian Ministry of Environment, Urban Health and Sustainable Development. Approximately 30 participants were present, in addition to 2 UN Environment representatives and a PCB project expert.

47. The 6th Steering Committee Meeting of the project (July 2016, Nairobi) aimed to objectively assess achieved results; agree on the need to further extend the project (no cost); agree on a business plan for this extension period; confirm the engagement of stakeholders; and, reinforce collaboration and information exchange between UN Environment, the BSCRC and the other partners. Participants included the representatives of UN Environment, of ECOWAS, the Director of the BSCRC, the Basel and Stockholm Conventions Focal Points, the Regional PCB Coordinator, as well as representatives of electricity companies and the PCB Project International Expert. Senegal, Mali, Burkina Faso, Benin, Côte d'Ivoire, Togo, Niger, Mauritania, Guinea Conakry and DR Congo participated.
48. The 7th Steering Committee meeting of the project was held in January 2017 in Bamako, in the presence of the member countries' electricity company representatives. The meeting objectives were to assess the disposal commitments made in Nairobi; validate the January/June 2017 Work Plan; and, assess notifications for the initiated transfers, as well as challenges and solutions. Participants included the representatives of UN Environment, of ECOWAS, the Director of the BSCRC, the Basel and Stockholm Conventions Focal Points, the Regional PCB Coordinator, as well as National Coordinators, representatives of electricity companies and the PCB Project International Expert. Senegal, Mali, Burkina Faso, Benin, Côte d'Ivoire, Togo, Niger, Mauritania, Guinea, and Cameroon participated.
49. The 8th and final Meeting of the Steering Committee (Nairobi, June 2017) established a set of final goals and means required to meet these, and for which a final no-cost extension was sought. This included reallocation of funds from the AFLDC Projects (to help utilize unspent funds) in support of completion of the inventories of polychlorinated biphenyl (PCB) wastes in 8 of the countries.

### **3.5 Changes in Design During Implementation**

50. The Project was designed to run for 60 months (5 years), from November 2010 to December 2015. Further to CEO Endorsement in October 2010, the Project Cooperation Agreement between UN Environment and the Executing Agency BSCRC-AF was signed on 17 November 2010. Subsequent to this 6 Amendments were put in place; of these 3 were for no-cost extensions that were granted by the GEF, effectively extending the Projects duration until March of 2018, or 3 years more than originally planned. The Project requested these extensions as it experienced delays with its start-up and had low initial delivery.

51. The salient points of the above mentioned Amendments, as regards changes in design, are the following:

- Amendment 1 to Project Cooperation Agreement: Budget revision to reflect expenditures to the GEF Trust Fund of US\$ 597,649 in the year 2011, and to re-phase balance;
- Amendment 2 to Project Cooperation Agreement: Budget revision to reflect actual 2012 expenditures and realign future year budgets and, to note that co-finance from the African Development Bank (BAD) would not be realized, leading to a shortfall of US\$ 2,000,000<sup>21</sup>. Overall this reduced the initially expected budget as shown in the table below.

**Table 1 - Overall Project Funding (by source)**

Total Cost/Budget	US\$
Cost to GEF Trust Fund (unchanged)	4,889,399
Third party co-finance (cash)	7,400,656
Third party co-finance (shortfall BAD)	(2,000,000)
Updated third party co-finance (cash)	5,400,000
Third party co-finance (in-kind)	2,238,286
New cost of the project	12,528,341

- Amendment 3 to Project Cooperation Agreement: no cost extension until September 2016 and budget revision due to implementation delays. These regard, in particular failure to obtain the expected co-financing from the ADB and electric utility companies holding transformers. Additionally Cote d'Ivoire, Mali and Burkina Faso faced political unrest, and the outbreak of Ebola affected Guinea. Furthermore, the implementation of the Regional Treatment Centre was cancelled by the Ivory Coast and this forced the project to develop a new business plan, which opted to establish temporary storage sites and export of contaminated equipment to Tredi for destruction. The new disposal plan with Tredi was limited to decommissioned transformers. As regards the budget revision, this concerned the reflection of actual expenditures for 2013 and 2014, and re-phasing of unspent funds to 2015 creating a new budgetary commitment of USD 3,309,632;
- Amendment 4 to Project Cooperation Agreement: no cost extension until 30 June 2017, however legal instrument remained in force until December 2017, to allow for financial and reporting closure. This extension was requested to allow for elimination of 647 tons found in Senegal, DRC, Cote d'Ivoire, Mauritania, Niger and Togo; this in light of the fact that the 1,150 tons of PCB provided for in the 2015/2016 extension were not decommissioned. Only 700 tonnes were identified and stored in the temporary storage sites in Burkina Faso, Togo, Niger, Guinea and Ivory Coast;

<sup>21</sup> UN Environment representative reported that this was due to the fact that the co-financing request was never transmitted to the Bad, adding that a request would be prepared and transmitted - Steering Committee Meeting Report – July 2013

- Amendment 5 to Project Cooperation Agreement: no cost extension until 31 March 2018 however legal instrument remains in force until 30 September 2018, to allow for financial and reporting closure.
52. The project underwent a Mid Term Review (MTR), which focused mainly on pilot activities, as at that stage the replication had not yet commenced. The MTR identifies a number of constraints that hampered project implementation, most notably the gap in financial resources from ADB and IDB accounting for 40% of the foreseen cash budget; the decision by the Ivory Coast to prohibit imports of PCBs effectively condemning the set up of the regional treatment centre; the absence of the PCB regulatory framework and, finally goes on to note deficiencies in terms of lead times required for implementation of activities as compared to the expected timetable. Overall the MTR assesses the project as Satisfactory.
53. A burn trial test of mineral oil contaminated by PCB at levels of less than 500ppm at a cement kiln in Morocco was anticipated by the project. This was considered pertinent as cement kilns exist in many of the participating countries, and depending on trial results could have been used to incinerate PCB contaminated mineral oils. This co-incineration alternative, if feasible, would have limited transboundary movement of hazardous wastes and reduced costs and risks of transportation. However, Morocco, in addition to having banned imports of PCBs, felt that even if the trials had been successful, it would not receive assurances of non-intended releases of UPOPs. This activity was therefore also canceled.
54. Finally, the component aimed at having Project activities monitored by an independent authority was also canceled (shortage of funds); this was to be covered by BAD IDB – and initial discussions took place with a French company (INERIS) during a joint meeting of BCRC, FFEM, TREDI and INERIS representatives.

### 3.6 Project Financing

55. Given that at the time of evaluation the project was still being implemented, the Evaluator did not have access to final financial information regarding expenditure or co-finance. The information presented below is only updated to June 2017 for project expenditures and to December 2017 for co-financing, and was provided by the Project Coordinator and/or by UN Environment. The PIR does not provide any detailed co-finance expenditure figures, however the evaluator was provided with the most recent co-finance report from BCRC-AF (December 2017), which shows that USD 4,170,266 cash co-finance has been received.
56. The justification provided in support of amendment 4 to the Project includes the following regarding the non-materialization of expected co-financing: “Firm commitment by co-financers was not completed at the time of PIF submission and the negotiations failed during the implementation of the project [which] has impacted in terms of quantitative results including the identification of PCBs and their destruction”. It goes on to indicate that that the resulting shortfall from the ADB represents 20.75% of the overall planned co-financing, while that from the IDB is equivalent to 20.55% (respectively 2,000,000 USD and 1,980,632 USD). As a result, the GEF contribution initially estimated to represent 34% of the total incremental costs rose to an actual 54%, whereas co-financing dropped from an expected 66% to a materialized 46%. The table below illustrates these findings.

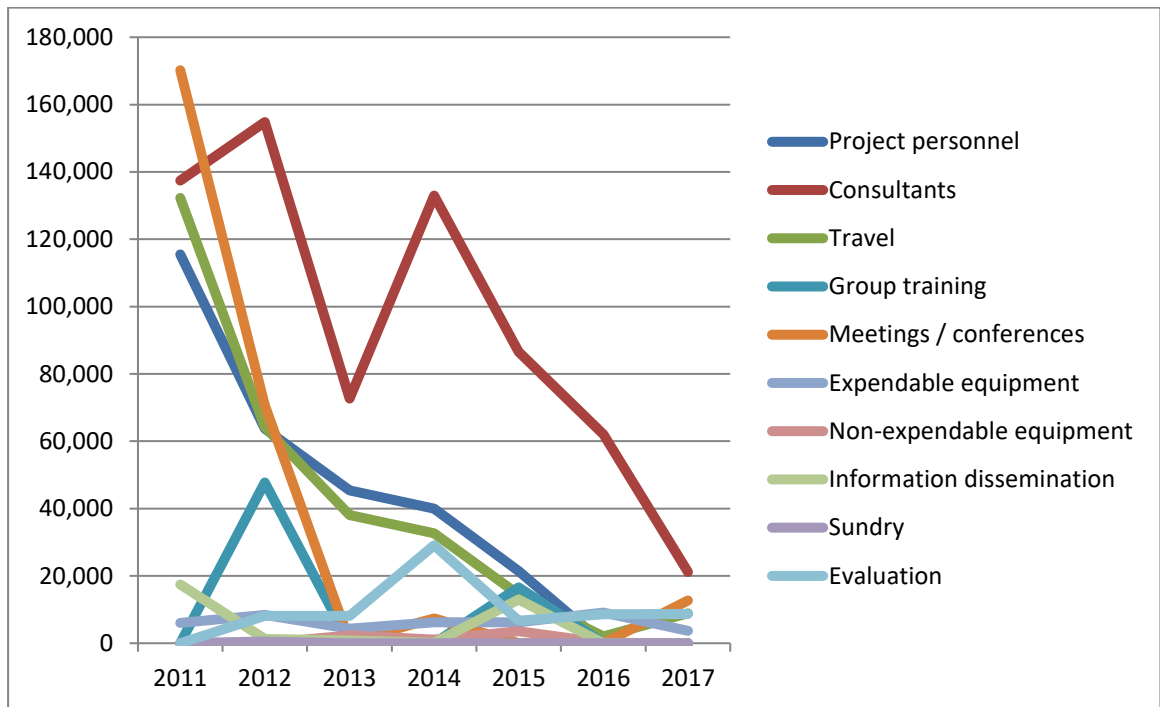
**Table 1 - Overall planned and realized co-financing**

Source of Co-finance	Planned US\$	% of overall planned	Actual USD	% Achieved	% of overall actual
GEF Trust Fund	4,889,399	34%	4,889,399	100%	54%
<b>Cash co-financing</b>					
BAD	2,000,000		0	0%	
FFEM	1,000,655		1,120,000	112%	
Private sector	2,419,369		0	0%	
IDB	1,980,632		0	0%	
Sub-total cash co-financing	7,400,656		1,120,000	15%	
<b>In-kind co-financing</b>					
Governments	804,950		804,950	100%	
Private sector	1,283,336		2,015,316	157%	
Agency	150,000		150,000	100%	
Sub-total in-kind co-financing	2,238,286		2,970,266	133%	
<b>Total co-financing</b>	<b>9,638,942</b>	<b>66%</b>	<b>4,090,266</b>	<b>42%</b>	<b>46%</b>
<b>Grand Total GEF and co-financing</b>	<b>14,528,341</b>		<b>8,979,665</b>	<b>62%</b>	

57. The latest project expenditure information figures provided show that 69% of the GEF resources have been spent as at June 2017 (see below). This low expenditure level (at time of project closure) can be in part explained by the fact that the sub-contracts budget (for destruction) only shows 53% expended, leaving approximately 1,5 Million USD.

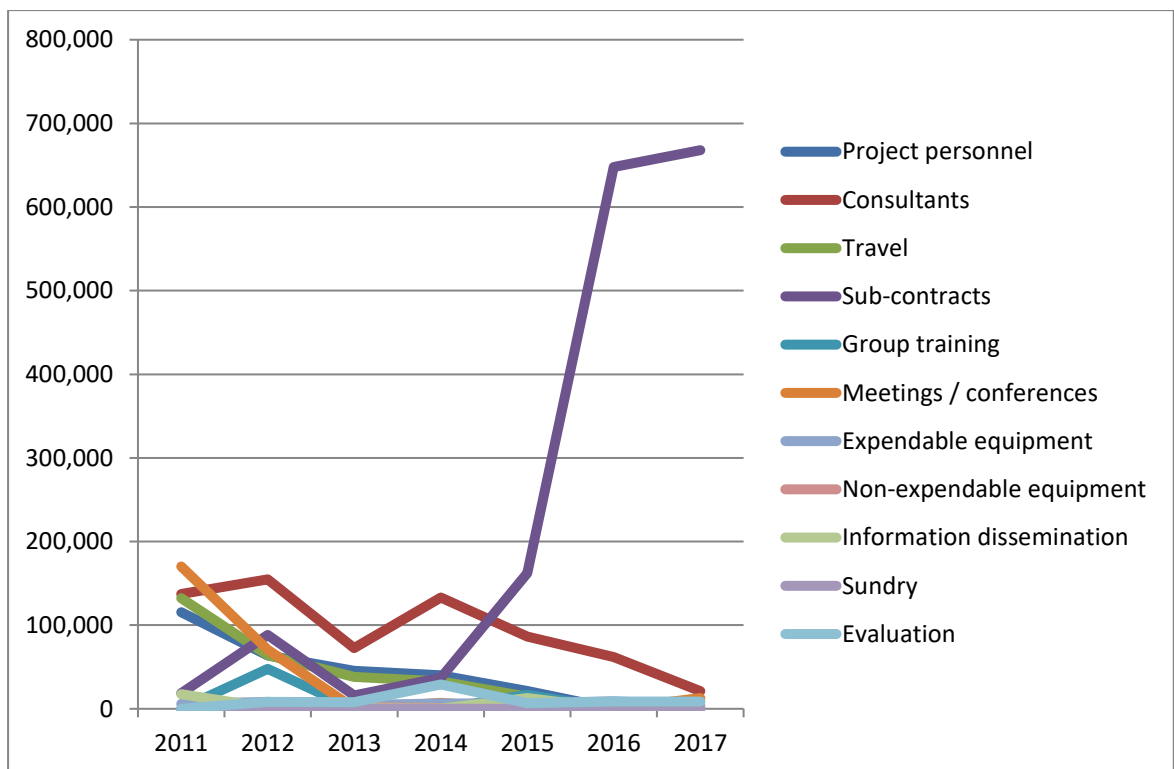
58. As can be seen from the figure below, budget lines have been exercised in a coherent manner i.e. high expenditure levels at project start-up for the related “soft” activities, and as regards consultants, a second peak of activity for the initiation of the “hard” activities (destruction). The expenditures to cover for the destruction related activities (Tredi)

Figure 1 - Expenditures over the life of the Project (by line item but excluding sub-contracts)



59. However, as can be seen from the figure below, and as can be expected in this type of project where soft, non-investment type activities have to be completed prior to the investment ones, the pace has picked up significantly since 2016. This amount will reportedly be expended, prior to the financial closure of the Project.

Figure 1 - Expenditures over the life of the Project (by line item)



**Table 1 - Expenditure statements – January 2011 to June 2017**

Description	Original Budget	Rev 5	2011	2012	2013	2014	2015	2016	2017	Total	Balance	Execution
Project personnel	164,000	286,064	115,483	63,754	45,409	39,971	21,447	0	0	286,064	0	100%
Consultants	292,500	667,518	137,380	154,799	72,646	132,966	86,563	61,994	21,170	667,518	0	100%
Travel	209,755	303,672	132,259	64,228	38,067	32,687	14,367	2,024	8,906	292,538	11,134	96%
Sub-contracts	3,573,924	3,067,425	18,818	88,141	15,992	36,866	162,256	647,787	667,945	1,637,805	1,429,620	53%
Group training	128,400	64,301	0	47,749	0	0	16,552	0	0	64,301	0	100%
Meetings / conferences	434,650	298,675	170,184	70,670	480	7,341	0	0	12,715	261,390	37,285	88%
Expendable equipment	13,500	48,745	6,044	8,393	4,298	6,222	6,263	9,105	3,689	44,014	4,731	90%
Non-expendable equipment	0	7,045	0	0	2,306	1,063	3,561	115	0	7,045	0	100%
Information dissemination	21,170	32,673	17,446	1,319	811	111	12,986	0	0	32,673	0	100%
Sundry	1,500	16,535	35	500	0	0	0	0	0	535	16,000	3%
Evaluation	50,000	96,746.00	0	8,130	8,106	29,092	6,702	8,617	8,714	69,361	27,385	72%
<b>Total</b>	<b>4,889,399</b>	<b>4,889,399</b>	<b>597,649</b>	<b>507,683</b>	<b>188,115</b>	<b>286,319</b>	<b>330,697</b>	<b>729,642</b>	<b>723,139</b>	<b>3,363,244</b>	<b>1,526,155</b>	<b>69%</b>



60. The UN Environment's financial reporting system that was in place at the start of the project did not have the capacity to track expenditure at the component level; as a result, UN Environment did not require the Executing Agency to report expenditure by component nor to confirm the sources of co-finance. This said, the Evaluator did receive complete information from the EA on co-financing expenditures per component as at 31 December 2017, which is presented below.<sup>22</sup>

#### Co-financing expenditures by Component (Source BCRC)

Component	Notes	FFEM	Government	Private	UN Environment
C1: Strengthening regulation for the ESM of PCBs	Regulation related activities	8224		30,000	
<b>Total</b>		<b>8,224</b>		<b>30,000</b>	
C2: Building utilities for ESM of PCB containing equipment				313,316	
Travel management / CRCB	Mission cost BCRC for inventory in pilot countries	30,983			
Regional treatment site preparation	Equipment for inventory Mauritania	2,142			
Equipment treatment and destruction	PCB destruction in pilot countries	72,912			
<b>Total</b>		<b>106,037</b>		<b>313,316</b>	
C3: Implementation of the regional mechanism for ESM of PCBs				1,672,000	
Project coordinator / BCRC	Project coordinator salary	77,687			
Travel management / CRCB	Mission cost BCRC for PCB destruction in pilot countries	66,702			
Preparation of national storage hubs	Transfer Mali for storage hubs	22,382			
Equipment treatment and destruction	PCB destruction in pilot countries	330,994			
Expert working group meeting	Meeting for Business plan	2,841			
Project Steering Committee	Meetings for steering committees	258,630			
<b>Operating costs</b>	<b>Operating costs bank and fees and equipment maintenance</b>	<b>16,068</b>			

<sup>22</sup> During the draft evaluation report review round, it was noted by implementing agency stakeholders that a system to track expenditures by components was put in place during the project implementation (covering also GEF funds). However, this data was not made available during the evaluation process.

Component	Notes	FFEM	Government	Private	UN Environment
Computer, fax, copier, projector	Computer for project	1,346			
Audit		7,470			
<b>Total</b>		<b>784,120</b>		<b>1,672,000</b>	
<b>C4: Stakeholder awareness</b>	<b>Awareness activities</b>	<b>42,413</b>			
<b>Total</b>		<b>42,413</b>			
<b>C5: Project Management</b>			<b>804,950</b>		<b>150,000</b>
Project coordinator / BCRC	Coordinator salary for March, April, May, October	23,906			
Operating costs	Operating costs bank and fees and equipment maintenance	15,489			
Computer, fax, copier, projector	Computer for project	778			
Audit	Audit PCB project	8,539			
<b>Total</b>		<b>48,712</b>	<b>804,950</b>		<b>150,000</b>
<b>GRAND TOTAL</b>		<b>989,506</b>	<b>804,950</b>	<b>2,015,316</b>	<b>150,000</b>

## 4 Theory of Change at Evaluation

### 4.1 Reconstructed Theory of Change at Evaluation

61. The Evaluator reconstructed a logical framework (Outcome and Output level) and although a generic Theory of Change was prepared prior to evaluation start, this was updated to take into account changes in project implementation. This allowed the Evaluator to reconstruct the outputs, outcomes, intermediate states and impacts as ToC at Evaluation, and is presented below (see Figure 1).
62. The Theory of Change was reconstructed as presented in Table 3 Project Outputs and Outcomes reconstructed at evaluation'; please note intermediate states are presented in the reconstructed ToC diagram.
63. The reconstruction was necessary to address the fact that the project did not include a ToC (not a requirement at the time of project development in 2007/08). In addition to this, the project did not include a single and complete logical framework, but rather a series of tables containing elements of what was used to reconstruct a complete logical framework. This is considered to be likely due to the genesis of the Project, as is explained in paragraphs 103 to 106 below. As a result of the piecemeal approach followed to develop and fine tune this Project first to address the FFEM's requirements, then the UN Environments, and then the GEFs, the evaluator was obliged to put the different elements present in the different sections of the project

document together, which allowed for reconstruction of one logical framework, and clarification of the Outputs and eventual Outcomes<sup>23</sup>.

64. This theory of change aims to capture a complex reality in a simplified manner by identifying the fundamental logic and assumptions behind a concept; it was tested in the field to verify accuracy and validity.

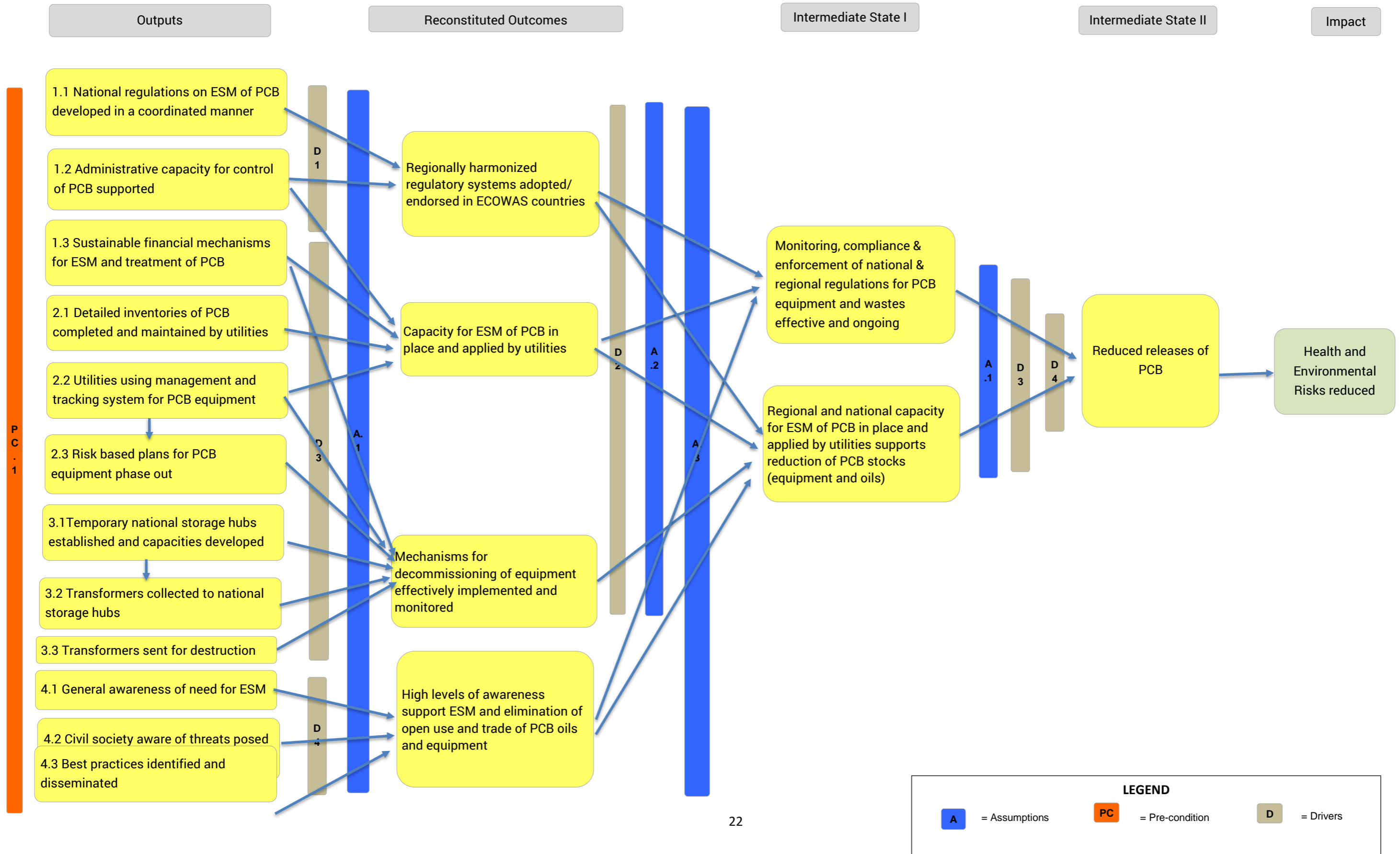
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<sup>23</sup> *Project Document: 3.4 Intervention Logic and Key Assumptions; Appendix 2 Co-Financing by Source; Appendix 8 Summary of Reporting Requirements and Responsibilities. Additional elements also to be found throughout the Project narrative*

Table 3 Project Outputs and Outcomes reconstructed at evaluation

Component	Outputs at design	Outputs at evaluation	Outcomes at design	Outcomes at evaluation
C1 - Enhanced and regionally harmonized national regulatory infrastructure and sustainable mechanisms	1.1 National regulations on the ESM of PCBs and PCB wastes in the context of the Stockholm and Basel Conventions developed in a coordinated manner	1.1 National regulations on the ESM of PCBs and PCB wastes in the context of the Stockholm and Basel Conventions developed in a coordinated manner	Regionally harmonized regulatory infrastructure for ESM of PCBs oils, equipment & wastes	Regionally harmonized regulatory system adopted / endorsed in ECOWAS countries
	1.2 Administrative capacity for controlling PCB in each participating country	1.2 Administrative capacity for controlling PCB in each participating country supported/developed	Enhanced monitoring & enforcement capacity of national authorities	
	1.3 Sustainable financial schemes for ESM and PCB treatment	1.3 Sustainable schemes (financial mechanisms) for ESM and PCB treatment developed	ESM & PCB phase out and treatment operational on a sustainable basis <i>(For the Evaluation, now considered Intermediary State I)</i>	
C2 - Enhanced regional capacity for ESM of PCB containing equipment in service	2.1 Detailed inventories of PCB oils, equipment & wastes completed and maintained by utility companies in each participating country	2.1 Detailed inventories of PCB oils, equipment & wastes completed and maintained by utility companies in each participating country established	Improved generation and collection of data and information on PCBs for sound decision making and planning for ESM of PCBs at the national level	Capacity for ESM of PCB in place and applied by utilities
	2.2 Participating utilities equipped with and using environmentally sound management & tracking systems for PCB equipment	2.2 Participating utilities equipped with and using Environmentally Sound Management (ESM) & tracking systems for PCB equipment	Reduced risk of PCB releases from equipment remaining in service <i>(For the Evaluation, now considered Intermediary State II)</i>	
	2.3 Risk-based PCB equipment phase out plans prepared and in place in utilities companies	2.3 Risk-based PCB equipment phase out plans prepared and in place in utilities companies	Electrical utilities in the region practicing the ESM of PCB oils and equipment and progressively removing PCB equipment from high-risk locations	
C3 - Regional mechanism for ESM of decommissioned PCB liquids and equipment	3.1 Regional operators (road and railway transporters) trained and licensed to provide collection and transport services for PCB equipment	3.1 Temporary storage hubs established and capacities developed	Environmentally Sound services for collection and transport of PCB equipment and wastes available within the region	Mechanisms for decommissioning of equipment effectively implemented and monitored
	3.2 Transformers (target 2,580 t) drained and collected to national storage hubs	3.2 Transformers collected to national storage hubs		
	3.3 Transformers (target 2580 t) transported to regional treatment centre	3.3 Transformers sent for destruction		
	3.4 Site studies and selection for Regional treatment centre	<i>Completed as part of development of the project</i>	Sustainable regional facility providing environmentally sound treatment of PCB equipment	
	3.5 Regional centre established and transformers treated (target 2580 t containing or contaminated with PCBs)	<i>Cancelled</i>		
	3.6 Test burn of PCB contaminated oils (<500ppm) at a suitable cement kiln in the region	<i>Cancelled</i>	Criteria for ESM of PCB wastes in cement kilns defined in accordance with the Basel and Stockholm Conventions	
	3.7 Project activities monitored by independent authority	<i>Cancelled</i>	Project activities meet environmental standards <i>(For the Evaluation, not a project outcome - quality criterion for project activities)</i>	
C4 - Development and implementation of a strategy for the diffusion of information on demonstration of a regional approach for ESM of PCBs - Stakeholder awareness and replication	4.1 Government, public and private sector owners of electric equipment aware of need for ESM	4.1 Government, public and private sector owners of electric equipment are aware of need for ESM	Reduction of uncontrolled trade of PCB oils and equipment <i>(For the Evaluation, now considered intermediate state II)</i>	High levels of awareness support ESM and elimination of open use and trade of PCB oils and equipment
	4.2 Information material and campaign on the threats posed by open use of PCB oils	4.2 Information material and campaign on the threats posed by open use of PCB oils completed	Reduction of local trade and open use of PCB oils <i>(For the Evaluation, now considered intermediate state II)</i>	
	4.3 Best practices for introduction of ESM identified, documented and disseminated to participants, other stakeholders and Parties of the Stockholm Convention	4.3 Best practices for introduction of ESM identified, documented and disseminated to participants, other stakeholders and Parties of the Stockholm Convention	Best practices for implementing ESM replicated in other industry sectors and in subsequent projects	

Figure 1 Theory of Change at Evaluation



## 4.2 Causal Linkages

65. The Theory of Change includes one pre-condition that needs to be in place before project can start <sup>24</sup>:

- PC.1 Strong Government support and commitment at highest national level; (strong ministry of Environment commitment is required but is not a sufficient pre-condition) e.g. leadership for approval of regulatory framework and mainstreaming of Stockholm Convention and Environmentally Sound Management (ESM) in national development agenda

### *Outputs to Direct Outcomes*

66. The delivery of the 12 Outputs leads to the achievement of one or more of the four Direct Outcomes<sup>25</sup>:

- Regionally harmonized regulatory system adopted/endorsed in ECOWAS countries
- Capacity for ESM of PCB in place and applied by utilities
- Mechanisms for decommissioning of equipment effectively implemented and monitored
- High levels of awareness support ESM and elimination of open use and trade of PCB oils and equipment

67. The achievement of these Outcomes is to different extents influenced by Assumptions and Drivers, discussed below.

68. Delivery of reconstructed Outputs 1.1 and 1.2 contribute to the achievement of the first Direct Outcome: “Regionally harmonized regulatory systems adopted/endorsed in ECOWAS countries”, through the transposition into national Law of the obligations contracted under the Stockholm Convention, supported by appropriate information and training (customs, utilities, etc.), and by the ultimate development of financial mechanisms extending well beyond the Project implementation period (until 2025).

69. Delivery of reconstructed Outputs 1.2, 1.3, 2.1 and 2.2 contribute to the achievement of the second Direct Outcome: “Capacity for ESM of PCB in place and applied by utilities”, through methodological work to support their environmental officers and equipment users/owners to accurately locate and characterize PCB containing equipment and oils, in order to prepare accurate waste management plans. This includes the development of inventory models for equipment/oils with pure/high PCB concentrations, as well as development of inventory/estimation models for equipment/oils with low concentrations.

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<sup>24</sup> Pre-conditions can either be “in place”, or “partly in place” or “not in place”

<sup>25</sup> It is important to note that although the project approach is regional in scope, only harmonization of legislation is regional *sensu stricto*; capacity for ESM, mechanisms for decommissioning of equipment and high levels of awareness must take place at the national level before being considered as regionally valid, and even then this will be a broad generalization

These detailed inventories are a key element of the project and informed both the development of risk assessment models to prioritize actions and, determination of the approach implemented during phase 2 (destruction).

70. Delivery of the reconstructed Output starting with serial number “3”, as well as 1.3, 2.2 and, 2.3 contribute to the achievement of the third Direct Outcome: “Mechanisms for decommissioning of equipment effectively implemented and monitored”, through development of detailed inventories, use by utilities of management and tracking systems and resulting preparation of sound PCB final disposal business plans, collection and conditioning of equipment in temporary storage sites prior to shipment for decontamination and final destruction of PCBs in in a facility located in France. This is aligned with the obligations set out by the Stockholm Convention which require Parties to develop strategies for identifying products and articles in use and wastes consisting of, containing or contaminated with intentionally or unintentionally produced POPs.
71. To this effect, Parties are required to take measures to handle, collect, transport and store these pollutants in an environmentally sound manner; dispose of them ensuring that POP content is destroyed or irreversibly transformed into substances that no longer exhibit POPs characteristics, or dispose of them in an environmentally sound manner when destruction or irreversible transformation is not the environmentally preferable option (or POP content is low); and finally, to ensure these pollutants are not subjected to disposal operations that could lead to recovery, recycling, reclamation, direct reuse or alternative use of POPs.
72. Lastly, delivery of the three reconstructed Outputs starting with serial number “4” contribute to the achievement of the fourth and final Direct Outcome: “High levels of awareness support ESM and elimination of open use and trade of PCB oils and equipment”, through development and implementation of a strategy for the diffusion of information demonstrating the benefits of a regional approach for the ESM of PCBs and aimed at strengthening and raising awareness amongst stakeholders.

#### *Direct Outcomes to Intermediate State*

73. Attainment of the first Intermediary State “Monitoring, compliance and enforcement of national and regional regulations for PCB equipment and wastes effective and ongoing” requires that Direct Outcomes 1, 2 and 4 be in place, respectively “Regionally harmonized regulatory system adopted/endorsed in ECOWAS countries”, “Capacity for ESM of PCB in place and applied by utilities”, and “High levels of awareness support ESM and elimination of open use and trade of PCB oils and equipment”. This means that national laws must first be adopted and enforced, supported by information and training, in combination with up to date inventories used to develop accurate risk assessment models to prioritize destruction related interventions, and backed by development and implementation of a strategy for the diffusion of information demonstrating the benefits of a regional approach for the ESM of PCBs and aimed at strengthening and raising awareness amongst stakeholders.

74. Attainment of the second Intermediary State “Regional and national capacity for ESM of PCB in place and applied by utilities supports reduction of PCB stocks (equipment and oils)” requires realization of Direct Outcomes 1, 2, 3 and 4, respectively “Regional and national harmonized regulatory system adopted”, “Regionally harmonized regulatory systems adopted/endorsed in ECOWAS countries”, “Capacity for ESM of PCB in place and applied by utilities”, “Mechanism for decommissioning of equipment effectively implemented and monitored” and “High levels of awareness support ESM and elimination of open use and trade of PCB oils and equipment”. This requires that harmonized regulatory systems be adopted and put in place, in support of completion of up to date inventories be used to develop accurate risk assessment models prioritizing destruction related interventions. This in turn supports development of sound PCB final disposal business plans, and facilitates the successful collection and conditioning of equipment in temporary storage sites prior to shipment for decontamination and final destruction of PCBs. In support of this, development and implementation of a strategy for the diffusion of information demonstrating the benefits of a regional approach for the ESM of PCBs and aimed at strengthening and raising awareness amongst stakeholders is also a pre-requisite.
75. The successful achievement of these two Intermediary States, also influenced by the drivers described below, would lead to the final second level State of “Reduced releases of PCBs”, ultimately supporting the attainment of the sought after impact of reduction of health and environmental risks.

### *Impact*

76. The ultimate impact that the Project seeks to contribute to links directly to the GEF Global Environmental Benefit: “**Risks from POPs to public health and the Environment are reduced**”. This impact will eventually be realized when the Intermediate States I and II have had time to effectively reduce the quantities of PCBs in the country and to reduce the risks of use and eventual re-use, through the successful delivery and combined results of the 10 Outputs. Its realization will also be directly influenced by the realization of the 3 Direct Outcomes, as described above.

### *Assumptions and Drivers*

77. Assumptions <sup>26</sup>- These need to be valid for ToC to hold:
- A.1 Governments are committed and consider this intervention a national, and regional priority (reducing flux of PCB reduces global environmental and human exposure to risks); Underlying assumption 1: co-financing is made available in a timely manner
  - A.2 UN Environment has the capacity and resources at HQ and at country level to support delivery of the expected results;

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<sup>26</sup> Assumptions can either be “accurate” or “inaccurate”, “realized” “not realized”, “in-place” “not in place” or “uncertain”



- A.3 Executing Agency is capable of driving the project at national level Underlying assumption 1: Executing Agency (EA) has the capacity to contract, manage and deliver the expected results (reducing exposure to PCB)
- A.5 Context related assumption: political continuity in countries involved

78. There are likely to be more underlying assumptions. However, this ToC aimed only to identify those without which the projects logic was likely to fall apart.

79. Main drivers – initial<sup>27</sup>. These are external conditions over which the project has some level of control, and can influence the achievement of the next level results:

- D.1 Strategy is convincing to countries (harmonizing regulatory regimes allowing a sustainable regional approach)
- D.2 Pressure on government from peers and from Basel Regional Centre Secretariat to implement the Stockholm Convention
- D.3 Pressure from governments on utilities to remove PCBs in support of compliance with Stockholm Convention obligations
- D.4 Pressure from Civil Society, media and public to address PCBs as a result of awareness raising activities

## 5 Evaluation Findings

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### 5.1 Strategic Relevance

#### 5.1.1 Alignment to UN Environment Mandate, Medium Term Strategy and Thematic Priorities

80. The project contributes to the results framework of the UN Environment Programme of Work 2010-2011 (PoW 2010-2011) under Sub-programme 4 - Environmental Governance and, 5 – Harmful Substances and Hazardous Waste. Under Sub-programme 4, the project is directly in-line with Expected Accomplishments A (achieving synergies and demonstrating increasing coherence in international decision-making processes) and B (strengthened capacity of States to implement environmental obligations, including integration of Gender equity principles). Under Sub-programme 5 these interventions address Expected Accomplishments A (mainstreaming sound management of chemicals into development policies, primarily in LDCs); B (support in setting the international environmental chemical and waste agenda) and, C (support implementation of multilateral environmental agreements at the national and regional levels).

81. The project also contributes to the results framework of the UN Environment Programme of Work 2016-2017 (PoW 2016-2017) under the Chemicals and Waste Sub-programme and corresponding Expected Accomplishment B (Countries, including major groups and stakeholders, increasingly use the scientific and technical knowledge and tools needed

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<sup>27</sup> Drivers are external conditions that can be influenced by the Project

to implement the sound management of chemicals management and the related multilateral environmental agreements). Respective PoW Output 4 – Scientific and technical services delivered through multi stakeholder partnerships, to build the capacities of governments, the private sector and civil society to take action on the risks posed by chemicals including those listed in relevant MEAs.

82. As regards the UN Environment Medium Term Strategy, the project directly contributed to the delivery of 2 of its cross cutting thematic priorities<sup>28, 29</sup>: (d) Environmental governance (supporting States to increasingly implement environmental obligations and achievement of priority goals); and, e) Harmful substances and hazardous waste (to minimize impact on the environment and human beings).
83. Work under the Environmental Governance priority aimed to improve coherence and cooperation among environment related mechanisms in order to strengthen environmental governance at country, regional and global levels to address environmental priorities. This included supporting governments to “establish, implement and strengthen processes, institutions, laws, policies and programmes, as well as working with UN entities, international institutions, regional environmental bodies” and others “to increase mainstreaming of environment into other sectoral processes and policies, including at the country level”.
84. Work under the harmful substances and hazardous waste priority aimed to support the development and evolution of internationally agreed chemical management regimes, and assisting countries in increasing capacities for sound management of chemicals, including supporting initiatives targeting chemicals covered by multilateral environmental agreements. UN Environment aimed to increase capacities and financing in support of reduced risks to human health and the environment and, for development of policy and control systems in line with States’ international obligations.

### 5.1.2 Alignment with the Stockholm and Basel Conventions

85. The provisions of the Stockholm Convention (Annex A, Part II, e), require that parties make determined efforts designed to lead to the ESM of liquids containing PCBs and equipment contaminated with PCBs having a PCB content above 0.005 per cent, in accordance with paragraph 1 of Article 6, as soon as possible but not later than 2028. The National Implementation Plans that are being undertaken in signatory countries are aimed at enabling these to prepare for the implementation of the main provisions of the

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<sup>28</sup> *Medium-term Strategy for 2010-2013 - UNEP (DEPI)/RS.10 /3*

<sup>29</sup> To implement its Medium Term Strategy, UN Environment was to actively reach out to “Governments, other United Nations entities, international institutions, secretariats of multilateral environmental agreements, civil society, the private sector and other relevant partners”

convention, in particular concerning the development of national strategies and action plans<sup>30</sup>.

86. The Basel Convention as called for within the Stockholm Convention (Art. 6.2)<sup>31</sup>, has developed guidance document on the environmentally sound management of POPs as waste, as well as PCBs. In this regard, the Basel Convention adopted the 'General technical guidelines for the environmentally sound management of wastes consisting of, containing or contaminated with persistent organic pollutants' and the 'Technical guidelines for environmentally sound management of wastes consisting of, containing or contaminated with polychlorinated biphenyls, polychlorinated terphenyls or polybrominated biphenyls'. These establish concentrations levels above which PCB wastes should be destroyed or otherwise disposed of in an environmentally sound manner.
87. The Project is fully aligned with both Conventions and will further more support countries in their phase-out and elimination process to comply with the Basel Convention which stipulates that any transboundary movement of hazardous wastes (export/import/transit) is permitted only when the movement itself and the ultimate disposal of the concerned hazardous wastes can take place in an environmentally sound manner and, if the State of export does not have the technical capacity and the necessary facilities for the environmentally sound management of the hazardous waste in question.

### 5.1.3 Alignment to Regional, Sub-regional and/or National Environmental Priorities

88. The stated Goal of the Project was to reduce risks to environmental and human health by reducing exposure to PCB releases controlled under the Stockholm Convention (SC) contributing to the implementation of their SC National Implementation Plans (NIPs).
89. The long-term development objective of the Project is to accelerate the withdrawal of PCB in use and the environmental sound disposal of PCB waste at the regional level, in an efficient and cost- effective manner in compliance with the Stockholm Convention and the Basel Convention.
90. The project objective is to enhance the collective capacity of the participating countries in planning and implementing their national policies for the environmentally sound management of PCBs and PCB containing equipment in the context of the Stockholm

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<sup>30</sup> Specifically, the Stockholm convention as per Annex A, Part II, requires that each Party shall: (a) With regard to the elimination of the use of polychlorinated biphenyls in equipment (e.g. transformers, capacitors or other receptacles containing liquid stocks) by 2025, subject to review by the Conference of the Parties, take action in accordance with the following priorities: (i) Make determined efforts to identify, label and remove from use equipment containing greater than 10 per cent polychlorinated biphenyls and volumes greater than 5 liters; (ii) Make determined efforts to identify, label and remove from use equipment containing greater than 0.05 per cent polychlorinated biphenyls and volumes greater than 5 liters; (iii) Endeavour to identify and remove from use equipment containing greater than 0.005 percent polychlorinated biphenyls and volumes greater than 0.05 liters.

<sup>31</sup> In accordance as well with decisions V/8 and VI/23 of the Conference of the Parties (COP) to the Basel Convention I/4, as well as INC-6/5 and INC-7/6 of the Stockholm Convention

Convention and the Basel Convention. All in support of the countries national priorities as set out in their respective NIPs.

#### 5.1.4 Alignment to Target Group and Beneficiary Needs and Priorities

91. This project contributed to achieving improved regulatory mechanisms in participating countries; it was in essence a capacity building project that targeted national and provincial governments and in particular public utilities involved in the management of PCBs, as well as civil society.
92. The project executed activities on several levels from provincial level staff, national level environment officers and the Ministerial level. Differing strategies were used to communicate with each of these groups. To increase public awareness the project worked through the POPs NFPs to communicate with the general public and relevant NGOs.
93. The Evaluator met with stakeholders in 4 countries and in addition met with a number of others in the margins of the final project's Steering Committee Meeting (Nairobi, June 2017). Relevance to target groups was made clear and the interviews provided ample evidence that stakeholder groups had not only been reached, but demonstrated a good to very good understanding of the issues at hand. Interviews provided ample opportunity for the Evaluator to confirm that, without exception, stakeholders considered the project to be of high relevance.
94. As well, outputs were considered necessary to deliver the expected results and stakeholders demonstrated a desire and confirmed the need for a follow-on project, as evidence indicated that the intended results would not be achieved through this intervention alone. It is also evidently clear that without additional support, the countries could not deliver the expected results alone.
95. Overall alignment is demonstrated for the countries, target groups and beneficiaries, however the Evaluator documented serious concerns that cover a range of issues from design to alignment, namely:
  - Awareness raising activities should take place before, or in parallel, with data collection ones to maximize the results (inventories in the case of this intervention) should have sought to build on the capacities of those whose awareness had been raised;
  - These are essentially national interventions, and as such national priorities must be defined prior to an intervention, and for each individual country. There is a generalized and high degree of dissatisfaction amongst countries that did not benefit from a "pilot" activity that is best summed up by one stakeholders response arguing that national circumstances can vary, as a result of unexpected events,

hence a project should not be on a first come, first served basis. This will penalize countries, and will give an unfair competitive advantage to others.

### 5.1.5 Alignment to GEF Strategic Priorities

96. The GEF Operational Programme 14 on POPs provides for three types of activities that are eligible for GEF funding on the basis of incremental costs, noting that assistance for these activities focus primarily on the national level, and also, to a lesser extent, on regional and global activities. The project fits fully under two of the activities eligible for GEF funding, capacity building and on the ground interventions. <sup>[17]</sup><sub>[SEP]</sub>
97. These interventions were also aligned with GEFs goal “to promote the sound management of chemicals throughout their life-cycle in ways that lead to the minimization of significant adverse effects on human health and the global environment.” Specifically the project was aligned with POPs- Strategic Program 1 (SP1), strengthening capacities for NIP development and implementation, and Strategic Program 2 (SP2), partnering in investments for NIP implementation. This Project also contributes to Priority 2 as regards implementation of policy and regulatory reforms. In addition, the project contributed to sound chemicals management and POPs use and release reduction objectives.

### 5.1.6 Complementarity with Existing Interventions

98. The intervention was designed to be complementary to a number of other recent or ongoing or planned interventions by UN Environment and others including, in particular: UN Environment/UNDP Sustainable Chemicals Management Partnership Initiative; Strategic Approach to International Chemicals Management (SAICM) Quick Start Programme in the regions; European Union funded UN Environment and FAO executed programme in support of implementation of Multilateral Environmental Agreements in Africa, Caribbean and Pacific (ACP/MEAs Programme).
99. The Project also responds to a number of regional initiatives including: The Rabat Declaration on the Environmentally Sound Management of Hazardous Wastes (2001) which identifies obsolete pesticides, PCBs and used oils as the three priority hazardous waste streams requiring urgent action in Africa; and, the Programme of Action for Africa for Environmentally Sound Management of Unwanted Stocks of Pesticides, PCB and Used Oils (2001), developed to implement the Rabat Declaration, which states that “regional and sub-regional cooperation is key to ensuring a coherent and effective implementation” of the Declaration.

### 5.1.7 UN Environment Capacity Building and South-South Cooperation policies

100. Alignment with the Bali Strategic Plan for Technology Support and Capacity Building (BSP) is considered to have been strong as this intervention was essentially of an enabling and capacity-building nature and included activities geared towards facilitating implementation of the Stockholm Convention. The project is considered

relevant and consistent with the Bali Strategic Plan for Technological Support and Capacity Building as it supported a more coherent and effective delivery of capacity building and technical support, in particular as regards establishment of national databases.

101. Finally, for South-South Cooperation, the project was designed to assist LDCs in Africa and included a number of sub-regional networking and training activities. Evidence suggests that these activities have facilitated South-South cooperation and interview data confirms that the meetings were highly appreciated by participants and allowed for cross-fertilization and sharing of experiences. As such it is considered that the project is aligned with UN Environment South-South cooperation policies.

102. Considering all the above, and as per the UN Environment Evaluation Criteria Matrix, the Project is rated Highly Satisfactory as regards strategic relevance.

**Strategic Relevance rated 'Highly Satisfactory'**

## 5.2 Quality of Project Design


103. Evidence indicates that the project was initially written in 2007, at the behest of the Basel Convention Secretariat. This was presented to the FFEM in November of 2008 (FFEM Steering Committee Meeting) and then on 31 October 2008 to the FFEM Scientific and Technical Committee, further to which it received a positive recommendation (*Avis positif*). The document specifically indicates that coordination of the Project was to be supported by two existing regional structures: the BCRC would be the principal Executing Agency in charge of strengthening and harmonization of the regulatory framework, surveillance and control of PCB wastes, national and regional capacity building, and technical backstopping for the Project (through an independent agency<sup>32</sup>). The WAPP would be in charge of components requiring the direct participation of utilities, preparation of the detailed inventories, development of business plans, collection and, storage and transport of equipment to the regional treatment centre.

104. The document also notes that monitoring of the project would be entrusted to a French institution (INERIS is singled out), with decontamination carried out by a specialized institution (Tredi is pointed out as de facto operator). Recycling and re-use of the decontaminated materials would become the property of the operator of the facility. The project was subsequently adopted at the "identification stage" by the FFEM who agreed to a grant of Euro 800,000.

105. The PIF was concurrently prepared by UN Environment and approved by the GEF at the end of 2008. This fit in well with the GEF Secretariat strategy of a "Capacity building program for POPs in LDCs" to address the fact that West African countries had submitted a very limited number of POPs projects for funding. The Project was developed through a

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<sup>32</sup> This is not specified in the document

participatory process including 2 regional workshops for national focal points for the Stockholm and Basel Conventions and a regional meeting of representatives of the electrical utilities of participating countries. These meetings served to steer the project preparation, to ensure that the project meet national priorities, and to endorse its interim products. 

### *Strengths and Weaknesses*

106. Although the project was developed using the appropriate standards of the time, the Assessment of Project Design Quality identified significant weaknesses. The overall assessment is Moderately Satisfactory.

107. The main areas of strengths were in: Nature of External Context; Strategic Relevance; Governance and Supervision Arrangements; Learning, Communication and Outreach; Financial Planning / Budgeting; Efficiency; and Identified Project Design Weaknesses/Gaps, all of which scored Satisfactory.

108. The main areas of weakness were in: Project Preparation; Intended results and Causality; Logical Framework and Monitoring; Partnerships; and Sustainability / Replication and Catalytic Effects all of which scored Moderately Unsatisfactory. The main reason for this score is shown in Table 4 below.

**Table 4 Weaknesses in Project Design**

<b>Assessment area</b>	<b>Main issues</b>
Project Preparation	The stakeholder analysis and consultation was concentrated on institutional stakeholders (mainly utilities), with participating governments. It did not identify the other stakeholders whose attitudes and behaviours the project was intending to influence.
Intended results and Causality	The outcomes in the logical framework were confused with many being outputs and others being higher level intermediate states.
Logical Framework and Monitoring	Overall the Outcomes and Outputs are not presented in a concise and logical form and are confused, alternatively, referring to outcomes as objectives and/or to components as interventions or as activities. In addition, “outcomes” have been poorly formulated and are more akin in cases to outputs or to intermediate states / higher level results. The objectives are not all SMART. The indicators are not time-bound or achievable. Some are outside the control of the project

Partnerships	Preliminary review of project reports and interviews confirm that partnership analysis in the project design was not sufficient.
Sustainability / Replication and Catalytic Effects	The sustainability of the project is described as depending on the success of the pilot phases; a replication strategy was to be established during project implementation

109. Based on the above, and as per the Project Design Quality Assessment Table, the quality of design is rated moderately satisfactory.

**Quality of Project Design rated 'Moderately Satisfactory'**

### 5.3 Nature of External Context<sup>33</sup>

110. Although different external and country specific conditions occurred during the period of implementation of this Project, in general this Criteria is not considered to have had a significant negative effect on delivery of the expected Outputs.

111. Some countries were impacted at different times by external events, which included political unrest and security related concerns, however, overall during project implementation, this was considered to be mostly predictable and was, in general, only occasionally a minor to moderate threat to project implementation. As regards climatic events, in general the sub-region is considered to be subject to largely predictable disasters or changes, however in some cases these had intermittent or partial effects on project operations.

112. Regarding the security situation, social or economic issues or changes, these occasionally challenged project implementation but mitigation strategies were in general successfully developed. This also includes the fact that, in general, capacity is very low at all levels and partners reportedly required constant support and technical assistance during project implementation.

113. A number of countries did experience significant adverse impacts: Guinea where there were outbreaks of Ebola virus in 2014 and 2015 and subsequently travel restrictions and avoidance of meetings; and, further to civil unrest and the resultant heightened security, the Ivory Coast, and in the north of Mali, which impacted implementation between 2012 and 2015. Although Chad, Djibouti, Morocco and DRC never fully embarked on the Project, these also experienced civil unrest during the period of implementation.

<sup>33</sup> Where a project has been rated as facing either an Unfavourable or Highly Unfavourable external operating context, the overall rating for Effectiveness may be increased at the discretion of the Evaluation Consultant and Task Manager together



114. Using the UN Environment's Evaluation Criteria rating Matrix<sup>34</sup>, this criterion is considered to be Moderately Favourable.

***Nature of External Context rated 'Moderately Favourable'***

## **5.4 Effectiveness**

115. Effectiveness was assessed on the delivery of the restructured Outputs as at 31 December 2017 (reconstructed based on the project documentation), on the achievement of Outcomes and, the likelihood of impact. A summary of the delivery of the Project's Outputs is presented below. The delivery of key Outputs, or progress towards their delivery by project closure is also presented.

### **5.4.1 Delivery of Outputs**

116. Although the Steering Committee validated the Projects work plan and budget during the first year of implementation, the start-up of Project activities was slow due to external circumstances. There was a delay of 2 years in negotiating the Agreement with the FFEM, impacting delivery of the first tranche, which was only received at the end of 2013. The non-participation of WAPP in the project as second Execution Agency and the fact that Mali and the Ivory Coast experienced internal violence further complicated the start-up as well as the fact that, between 2011 and 2013, many countries in the region traversed an electricity generation crisis. In addition, in early 2013, the project was seriously undermined by two events:

- The decision by the African Development Bank (ADB) to cancel the funding which had been pledged during the project preparation (2 Mio USD)<sup>35</sup>; and,
- The decision of the government of Ivory Coast to ban all imports of chemicals wastes into its territory, de facto annulling the foreseen construction of a PCB treatment plan in Abidjan and forcing a radical change of plans to address Phase 2.

117. This situation required deployment of adaptive management practices and forced the project team and partners to think of alternative viable options to deliver results in support of objectives of Phase 2. Ultimately the agreed upon option as regards destruction was that of setting-up temporary storage sites in every participating country, where transformers could be drained of oils, and conditioning operations could take place, prior to shipment to Europe for destruction. The funding shortage also required measures be put in place to elicit stronger commitment from electrical utilities, since these would have to provide technical support for ESM, inventories and for the storage sites (in-kind co-financing).

118. As a result of these interventions, by June 2013 almost all of the elements initiated in 2011 as part of phase I of the project had been fully developed. The project team had

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<sup>34</sup> UN Environment's Criteria Ratings Matrix version dated 20 November 2017

<sup>35</sup> Reportedly despite best efforts from the Implementing agency and executing agency

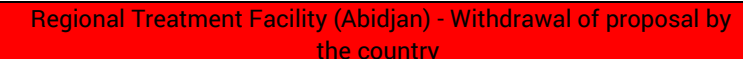
also prepared a business plan for phase 2, identifying main activities and measures required to adapt the projects future interventions to the financial shortfall. The development and approval of the new business plan played a significant role in the successful implementation of the Project, identifying potential sources of co-financing and alternative options for PCB treatment; this included reviewing their environmental and economic implications.

119. At the time of this Terminal Evaluation much remains to be done, however the Evaluator was able to document significant qualitative and quantitative results for all Direct Outputs<sup>36</sup>. This is presented in the Tables below, summarizing the overall results and status achieved, as well as the status of delivery of Outputs for each component; progress under each of the 4 Components is reviewed in detail and a summary of findings is presented in this chapter.

**Table 1 - Summary of Key Output Indicators (as at 31 March 2018)**

Countries	Regulations	Inventories	EMS	Temporary Storage	Awareness	Business Plan	Data Base	Destruction
Benin								80 tonnes
Burkina Faso								102.91
Cote d'Ivoire								240.343
Djibouti	No information available							
Guinea								82.006
Guiney Bissau	No information available							
Mali								
Mauritania								
Niger								347.47
DRC	No information available							
Senegal								254.94
Chad	No information available							
Togo								54.3
Morocco	Working on National PCB Project							
<b>Total</b>								<b>1,100</b>

 Completed

 Regional Treatment Facility (Abidjan) - Withdrawal of proposal by the country

<sup>36</sup> Taking into account that, at time of writing of this Terminal Evaluation, a number of the outputs have yet to be achieved

Countries	Regulations	Inventories	EMS	Temporary Storage	Awareness	Business Plan	Data Base	Destruction
	Ongoing		Mid-Term Review <sup>37</sup>					
	Not Completed		Terminal Evaluation					

**Table 1 - Summary of the delivery of the Project Outputs (various sources)**

Component	Outputs (at evaluation)	Status at evaluation
C1 - Enhancement and regional harmonization of national regulatory infrastructure and sustainable mechanisms	1.1 National regulations on the ESM of PCBs and PCB wastes in the context of the Stockholm and Basel Conventions developed in a coordinated manner	Delivered: Regional guideline being instituted into legislation at the national level. Developed and validated in Benin, Burkina Faso, Cote d'Ivoire, Guinea, Mali, Senegal, Togo and Niger. In Mauritania this is in the process of inclusion in overarching chemicals and hazardous waste legislation
	1.2 Administrative capacity for controlling PCB in each participating country	Delivered: Capacities of administrative authorities have been strengthened. Ivory Coast piloted this activity, which has been replicated in all 9 countries by BCRC
	1.3 Sustainable schemes (financial mechanisms) for ESM and treatment of PCB	Partially delivered: Guinea piloted the initiative. Replication did not occur, although Project transmitted report to all countries. This is being picked up in a successor project (Phase 3) currently in preparation
C2 - Enhanced regional capacity for ESM of PCB containing equipment in service	2.1 Detailed inventories of PCB oils, equipment & wastes completed and maintained by utility companies in each participating country	Delivered: Project supported 8 countries which have completed inventories and have a disposal plan in place (Burkina Faso, Cote d'Ivoire, Guinea, Mali, Mauritania, Niger, Togo); Senegal has completed inventory and has also included Environmentally Sound Management in their regulatory processes
	2.2 Participating utilities equipped with and using Environmentally Sound Management & tracking systems for PCB equipment	
	2.3 Risk-based PCB equipment phase out plans prepared and in place in utilities companies	Delivered: After the countries completed their inventories they implemented ESM measures. Senegal did this independently of the Project
C3 - Regional mechanism for ESM of decommissioned PCB liquids and equipment	3.2 Transformers collected to national temporary storage facilities and sent for destruction	Partially delivered: Mali piloted the demonstration; Plans for temporary storage sites for PCBs developed for all countries; sites in place in Benin, Burkina Faso, Cote d'Ivoire, Niger, Senegal and Togo. Site identified in Mali, however internal problems blocked progress. Ebola affected progress in Guinea.  1,200 tonnes destroyed by Tredi in France; An additional 700 tonnes secured in Burkina Faso, Cote d'Ivoire, Niger and Togo ready for destruction
C4 –Stakeholder awareness and replication	4.1 Government, public and private sector owners of electric equipment aware of need for ESM	Delivered: Pilot study completed by Benin. Workshops organized for stakeholders, electricity utilities, scrap dealers, maintenance technicians, etc.

<sup>37</sup> Evaluation office notes that although project documentation implies to an completed "evaluation", as the process was not managed by the evaluation office, it is considered to be a "review" (as per UN Environment and GEF guidelines)

Component	Outputs (at evaluation)	Status at evaluation
	4.2 Information material and campaign on the threats posed by open use of PCB oils	Communication and awareness tools produced and distributed to participating countries. These included Flyers, posters, tee-shirts, caps
	4.3 Best practices for introduction of ESM identified, documented and disseminated to participants, other stakeholders and Parties of the Stockholm Convention	Sensitization workshops carried out in Benin, Burkina Faso, Cote d'Ivoire, Guinea, Mauritania, Niger, Togo

***Component 1 - Enhancement and regional harmonization of national regulatory infrastructure and sustainable mechanisms***

120. The purpose of this component was to assist countries to adopt a regionally harmonized regulatory framework for the Environmental Sound Management (ESM) of PCB oils, equipment and wastes by transposing into Law the Obligations of the Stockholm Convention. In addition this Component aimed to enhance monitoring and enforcement capacity of national authorities to allow them to control and intervene at every stage in the life cycle of electrical equipment. Lastly, as the costs of destruction were only to be borne by the Project for the duration of Phase 2, which is by far not sufficient to deal with stocks of PCBs identified, this Component also established a Working Group to explore different financial mechanisms. These would have to be put in place to facilitate the sustainability of future destruction operations, beyond the life of the current intervention (until 2028).

121. The Task Force in charge of the evaluation of existing legal texts covering PCBs (Bamako, Basel, Stockholm, and Rotterdam Conventions) was established in 2011. By 2012 the assessment of the legal texts and regulatory matrix were halfway done and in early 2013 the regional directive on the ESM of PCB and PCB wastes was fully developed. 2013 also saw the transposition of this text into national laws. This initiative was piloted by the Ivory Coast and two reports were produced:

- *Projet de directive régionale sur les PCB (Draft Regional PCB Directive – January 2012)*. The purpose of this Directive is to make more compatible Member States Laws relating to the controlled disposal of PCBs, the decontamination or disposal of equipment containing PCBs and / or the final elimination of used PCBs;
- *Projet de texte de transposition en droit national (Draft Text for Transposition into National Law - January 2012)*. This document relates to the commercialization, use, decontamination, storage, and treatment of PCBs, disposal, transport, conditions for issuing approvals to waste treatment facilities for waste containing PCBs, rights and obligations of the holder of the approval and the responsibility of the producer of PCBs.

122. These regulations were subsequently developed for two levels, first a regional directive which incorporates the Basel and Stockholm obligations, and secondly a draft for transposition into national laws. At the regional level, a dialogue was engaged with

ECOWAS to implement a Regional Directive. However at the time of this Evaluation, this had not yet yielded concrete results and the activity was described as an ongoing administrative process that should eventually result in adoption of the above-mentioned Directive.

123. The Project successfully delivered on the development of regional and national regulations on the ESM of PCBs and PCB wastes in the context of the Stockholm and Basel Conventions. All countries have transposed the texts into national Law and have submitted these to competent authorities for approval and signature, with the exception of Mauritania where the process is still ongoing; the country opted to include PCB regulations in an overarching Chemicals Law, which should be signed in the course of 2018.
124. In 2012 Cote d'Ivoire piloted the initiative aimed at strengthening administrative capacities of national authorities<sup>38</sup> responsible for control of PCB and prepared a report. The document includes a judicial and institutional evaluation of controlled facilities, both for Inspectors and Customs agents; a review of administrative control processes as regards PCBs, followed by conclusions and recommendations. This was proposed as a model for replication in other countries. However as a result of the political situation in the country replication activities that were to be carried out by the experts having developed the texts, which targeted mainly holders, operators, transporters and recyclers of equipment and oils were undertaken directly by the BCRC. This took place in the context of country specific workshops, as part of BCRCs ongoing awareness raising interventions in all participating countries aimed at enhancing the administrative capacity for controlling PCB and combined EMS, Inventories and Awareness Raising activities of the Project.
125. In November 2013 a Pilot focusing on key sustainable financial mechanisms to implement plans for the ESM of PCBs was initiated and completed by Guinea Conakry. The terms of reference for this assignment included data collection in Guinea, as well as in participating countries, and projections to 2028 in order to establish a regional scenario for maximization of the energy potential of these wastes. In a second stage, this also included an assessment of potential CO<sub>2</sub> emissions reductions, assessment of carbon credits and based on this, an evaluation of financial options and sources of funding (including from environmental taxes), extrapolated to the region.
126. This pilot initiative was successfully completed, but not replicated. Evidence indicates this was a result of the Ebola outbreak, which brought the country, and Project related activities to a standstill. However, the results of this pilot have reportedly been picked up and are included in a successor project for which a PIF is under development. Financial mechanisms will in all likelihood be retaken in a Phase 3 of this Project and are expected to cover the 2020-2028 period.

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<sup>38</sup> Public servants and environmental management staff of companies holding transformers

***Component 2 - Enhanced regional capacity for ESM of PCB containing equipment in service***

127. The purpose of this Component was to carry out the methodological work to characterize PCB containing equipment, as the basis for the preparation of accurate PCB waste management plans. This entailed completion of detailed inventories of PCB oils, equipment & wastes, and identified PCBs for systematic reviews (chlorine titration). The objective being that once inventories were completed, utility companies in each participating country would maintain these. Inventories included in this project detailed PCB transformers in the electricity companies, and this is considered a key element of the project as it determined the feasibility of the means of destruction that would be implemented during Phase 2. If this information had not been available at the end of phase 1, no investment decision could have been taken to initiate Phase 2 (destruction of PCBs). Given the above mentioned slow-start of the project, this in part explains the delays in implementing Phase 2.
128. A second priority of this Component addressed preparation of risk-based Environmental Sound Management (ESM) phase out plans for PCB equipment, for uptake by the utilities. This is of particular relevance given for example that changes of voltage in distribution networks have led to the reform of many transformers, known to have been resold as used equipment without verification of PCB contents prior to the sale or purchase. The lack of regulation on PCBs, and the lack of ESM systems in electricity companies required an activity aimed at building capacity for management of the transformers. ESM covered all phases of the transformers life cycle from purchase to final destruction and aims to ensure tracking of PCB containing equipment in the electricity companies from purchase to final destruction; monitoring transformer oils in all phases of the life cycle (acquisition, maintenance, phase out); and, not anticipating their destruction if the risk diagnosis (assessment) demonstrates that they can stay in service with no risk to health and the environment.
129. As part of the rollout of this ESM system, the Project also developed a regional PCB database (PCB traceability tool) and national database for utilities from participating countries. This was conducted at the initiative of the BCRC and is reportedly completed, with training on the national database having taken place in Togo, Benin, Burkina, Guinea, Mauritania and Niger.
130. Togo agreed to pilot the inventory exercise and in this context set up a working group in 2011, and signed an MOU with the CEET to ensure access to best available information. After purchasing the necessary equipment to carry out an inventory exercise a training session was carried out for stakeholders. This reportedly triggered a very positive response and generated strong buy-in and support. Upon completion of the field visit, oil

samples were sent to the Tredi laboratory (France) for analysis<sup>39</sup> and these results were used to support preparation of finalization of the methodology to develop inventories.

131. Based on this a PCB disposal plan for transformers in service was elaborated for replication. The action plans and budgets prepared after the inventory exercise in Togo were validated in 2012 and to date 8 countries have replicated this and completed their detailed inventories of PCBs and have established their PCB management and elimination plans (up to 2028) at the utility companies: Togo (CEET), Benin (SBEE), Burkina Faso (SONABEL), Cote d'Ivoire (CIE), Guinea (EDG), Mauritania (SOMELEC), Senegal<sup>40</sup> and Niger (NIGELEC). Inventories are ongoing in Mali (EDM) and as a result, disposal plans are not yet in place (internal political issues). In addition, Burkina Faso (SONABEL) and Togo (CEET) both acquired PCB analysis equipment<sup>41</sup>, which shows strengthened capacity in the region.
132. In 2011 Burkina Faso started work on the pilot on ESM for PCBs. This concluded in 2012 with the electrical utility of Burkina Faso (SONABEL) having provided support to the pilot and later in the year fully adopting the methodology. This activity was successfully replicated and training was conducted in all participating countries; utilities are now equipped with and using environmentally sound services for collection and transport of PCB equipment and wastes, which are in place and available within the region. However, given the delays encountered by Senegal in the preparation of its inventory (internal reasons), by the time this had been completed, the Project funding had effectively been redirected towards destruction related activities. However, the country's Directorate for Environmental Quality and Security reportedly streamlined PCB ESM into its own guidelines, using the pilot guidelines as the basis.
133. Sensitization workshops on the need for ESM of PCB were organized in Benin, Burkina Faso, Cote d'Ivoire, Guinea, Mali, Mauritania, Niger and Togo - As a result, electricity companies that received training on the ESM saw their releases of PCBs to the environment from their transformer decrease<sup>42</sup>. All electricity companies received training on the ESM; leaks were repaired, and retention tanks installed. PCB transformers that had significant irreparable leaks were removed to the storage sites. Evidence confirms that sensitization has occurred at all levels, from management to maintenance services regarding the dangers of PCBs. This has also resulted in yearly medical examinations now being mandatory, and reportedly on the provision of protective equipment; although this is mentioned in PIRs, and was confirmed by the EA, the Evaluator was not able to document the presence of such protective gear in any of the visited facilities.

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<sup>39</sup> The analysis of the transformers could only be performed on part of the inventoried equipment, due to lack of funding, and also considering the fact that this was a demonstrative approach not intended to take into account the complete population of transformers.

<sup>40</sup> Finished their detailed inventories of PCB in June 2016

<sup>41</sup> These are L2000DX type identifiers to determine chlorine/PCB in the oil of transformers

<sup>42</sup> Interview data, backed by PIRs

### ***Component 3 - Regional mechanism for ESM of decommissioned PCB liquids and equipment***

134. The purpose of this Component was initially to establish a regional mechanism for ESM of PCBs and equipment, including decontamination. The project planned to build a PCB treatment plant in Abidjan, Ivory Coast, which required that the import of wastes from neighboring countries be allowed into its territory. However the unforeseen and unexpected closure of the border to imports of PCBs and PCB wastes by the Government of Ivory Coast derailed this. An alternative solution was recommended and approved by the Steering Committee to create temporary storage sites for PCB in each country prior to their transport, for destruction by Tredi in France.
135. In 2011 Mali piloted an initiative to identify and assess the feasibility of building a temporary storage facility. The assessment included a feasibility study of the technical options available for temporary storage, and the legal requirements applicable to hazardous waste storage facilities. It concludes with the preparation of a methodology for identification of temporary storage sites. This was completed and the report was sent to electricity companies for replication. Further to this temporary storage sites were identified in Togo, Benin, CI, Burkina Faso, Guinea, Niger, Mauritania, and. However Mali experienced a period of great internal disorder, delaying completion of its own inventory and storage site. The implementation of temporary storage was limited to countries that had completed their inventories.
136. Sites for temporary storage of PCBs were created/renovated and temporary storage plans for PCBs were developed in each country. Transfer of contaminated decommissioned transformers to the temporary storage sites was successful<sup>43</sup>, and by end 2017, 1,200 tons PCB had been secured in Togo, Burkina Faso, Niger, Senegal, Guinea and Cote d'Ivoire<sup>44</sup> and were subsequently eliminated at the Tredi facilities in France<sup>45</sup>. The inventories did not cover the complete population of transformers, as said before, and it appears other countries do not have PCB-oil transformers that are not in use (Mali and Benin). In addition, Benin at this stage only identified 9 tonnes for destruction, considered by the Project to not be cost-effective.
137. The transformers available for disposal are decommissioned and obsolete transformers as only off service and contaminated transformers were recovered and secured in the storage sites. In this sense, the disposal plan was limited to transformers that were out of use, and contaminated transformers still in service will continue operating until 2025, unless the financial means to replace them are found. This is due to the low to non-existent financial capacity of the electrical companies to replace the transformers that

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<sup>43</sup> Interview data indicated that in at least one country, as a result of Component 1 (regulations) it was now obligatory for Customs representatives to be present when transformers were relocated

<sup>44</sup> The country installed in addition a retention device for 34 units containing PCB oil

<sup>45</sup> At the request of the Steering Committee, TREDI was offered a direct contract for the elimination of PCBs in the countries participating in this Project. This was signed in July of 2014 and included sample analysis (US\$ 20 per sample), assessment equipment for disposal (US\$ 250 each), and all activities required to decommission transformers at a cost of between US\$ 300 and 500 (contaminated oils / pure PCB), plus administrative and supervisory costs of US\$ 25,000 per country, for a minimum of 600 tonnes (200 of pure PCB oils)



are connected and currently in service; this strongly supports a continuation of the Project, and the elimination of PCB transformers still in service could then take place during a subsequent Phase 3.

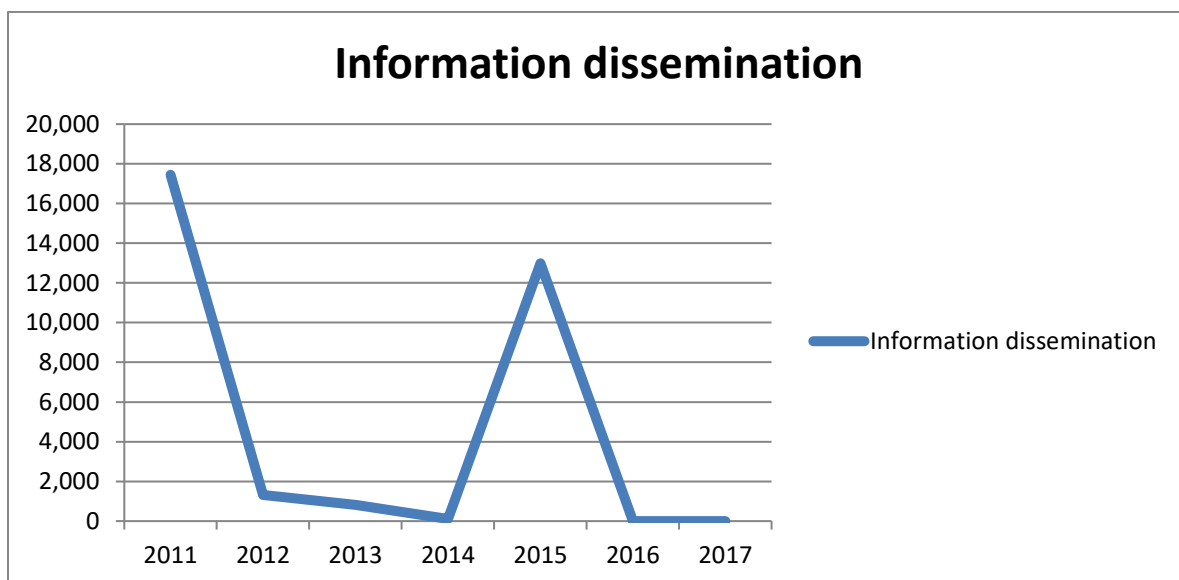
138. It is important to note that the initial availability of transformers was overestimated, and it has been established by the BCRC that the equipment holders potentially recycled off service devices (oils and metal carcasses); their recycling value, both for non-ferrous metals and, oils to be used as fuel acting as strong incentive. As a result, inventories were very low. In addition, the cost of replacement of PCB devices, at the expense of holders, presents difficulties in light of the financial realities of electrical companies, which prioritize investments towards production and distribution of electricity,
139. Given the above, it became apparent in 2013 that the target of 3,600 units would not be reached (disposal of decommissioned transformers outside the project framework and, lack of financial capacity for replacement). A total of 1,554 transformers were destroyed (all countries). At time of preparation of this Terminal Evaluation, an additional 700 tonnes of PCB have been secured in Togo, Burkina, Niger and Cote d'Ivoire.
140. In 2014 the notification procedures for transfers of equipment required for PCBs by the Basel Convention were initiated for countries whose PCB inventories had been completed. A delay in processing Basel Convention Notifications and lack of data from countries on exact amounts and locations of PCB wastes has further delayed project implementation.
141. By 2016 the project had made good progress in moving towards the elimination of PCB stockpiles. However, In light of the above mentioned delays the EA was granted a final project extension, this time to end of June 2017, to allow for the stocks to be removed for their environmentally sound disposal.
142. Based on the final secured co-finance, the target for PCB and PCB wastes to be disposed of was reset to 1,600 metric tonnes, and following discussion at the 2016 Steering Committee meeting, countries confirmed the amounts available for treatment at a total of approximately 1,550 metric tonnes. A comprehensive revised work plan and updated budget were developed by the EA, under close supervision by the IA, to meet the revised target (1,550 tonnes by end June 2017) and the project was placed under enhanced supervision (monthly progress reviews by UN Environment) to ensure the final timetable and milestones were met.
143. The results obtained from the first 2 demonstrative phases of the Project are being used for Phase 3, which will cover the management and phase-out of PCBs until 2025 and final disposal in 2028. This Phase 3 is expected to include comprehensive inventories, compliance plans and disposal in a regional treatment centre, and export of disposal plan for PCB oils (Benin, Burkina, CI, Guinea, Mauritania, Niger and Togo).

#### ***Component 4 – Stakeholder awareness and replication***

144. The purpose of this Component was to develop and implement a strategy for the diffusion of information concerning the demonstration of the benefits of a regional approach for the ESM of PCBs. This included raising the awareness of Government, public and private sector owners of electric equipment on the need for ESM and preparation of information material and campaigns on the threats posed by open use of PCB oils disseminated to participants, other stakeholders and Parties of the Stockholm Convention.
145. Benin successfully implemented the pilot project in 2012 and prepared a Guide on good practices. This includes a chapter on PCB related generalities; and reviews more in detail the measures to be taken in workshops handling PCBs. A second document prepared in the context of this pilot activity is a Communication Plan and Strategy to raise awareness of stakeholders. These was developed and in 2012 awareness raising workshops were organized in participating countries for stakeholders including electricity utilities, scrap dealers, NGOs, and transformer maintenance companies.
146. The workshops themes were horizontal and “cross-sectoral” in the sense that they covered all aspects of the Project, and included information relative to all of the Components: regulatory, EMS, inventories, storage and aimed to raise general awareness. The Beninese expert that developed the pilot delivered these in all countries with the exception of Senegal. The Evaluator was informed that this was due to the delay in completing their inventories, combined with the decisions of the Steering Committee and supported by UN Environment to focus funds towards destruction under Phase 2.
147. During the Second Steering Committee meeting in 2012, a restitution workshop was organized covering all of the pilot activities undertaken by the Project: regulations, inventories, EMS, temporary storage, financial mechanisms and awareness raising. Interviewed participants considered that the information received had been of very good quality and deemed the workshop highly successful. It is to be noted that although a formal restitution workshop only occurred once, as has been mentioned before, the BCRC, as a matter of principle, covered all of the Project’s Components during it’s country specific activities, be they workshops or meetings. This approach was described to the Evaluator as very informative and was appreciated by stakeholders.
148. Communication and awareness tools (T-shirts, caps, posters, flyers) were also prepared by the project and distributed to participating countries in the project. The Evaluator was a witness to this during the Steering Committee Meeting he participated in in Nairobi, but as well during the country visits where some of these items were on display.
149. Gender data has currently not been compiled for the project activities. At the time of project formulation, inclusion of gender consideration was not a requirement under the GEF. Gender is not an important factor in components 1 and 2. Evidence indicates that in component 3, women farmers were targeted in the behaviour change initiatives.

150. As can be seen from the graph below, expenditures relative to information dissemination and awareness raising related activities were highest at Projects startup and peaked again in 2015, coinciding with the full roll out of Phase 2. This strategy seems to have delivered the expected results and is positively noted by interviewed stakeholders.

Figure 1 - Yearly Information Dissemination Expenditures (USD)



151. In light of the above, and as 81-99% of the most important outputs were delivered in time to allow for high level use; as these were all deemed of very good quality/utility by stakeholders and reviewers; and as there are good levels of ownership by the intended users, the overall effectiveness of Delivery of Outputs for the Project is rated Satisfactory.

***Delivery of Outputs rated 'Satisfactory'***

#### 5.4.2 Achievement of Direct Outcomes

##### *Regional and national harmonized regulatory system adopted*

152. Evidence indicates that significant progress has been made towards adoption of a harmonized regulatory system, and that this would not have been possible without the support of the GEF funded intervention implemented by UN Environment. This is a major milestone as it sets the stage for all future Stockholm Convention related interventions, and is a factor that will influence sustainability.

153. One can as well argue that without this first series of successful Outputs, there would likely be much less uptake for what are, at this stage, essentially "voluntary" activities in support of Environmentally Sound Management systems, or for supporting the work required to complete the inventories (in-kind).

154. Interview data indicates that despite country specific difficulties<sup>46</sup>, this **Outcome can be considered as completed / expected to be completed at national level** in most countries in the course of 2018. The exception could be Mauritania, which has embarked on a more complex process aiming to include PCB related regulations in an overarching Chemicals Law.
155. As regards the development of a Regional regulatory framework, discussions with ECOWAS are described as ongoing and encouraging at project closure. Reportedly completion of this will form an integral part of Phase 3 of the Project, currently in preparation.

*Capacity for ESM of PCB in place, understood by authorities, and applied by utilities*

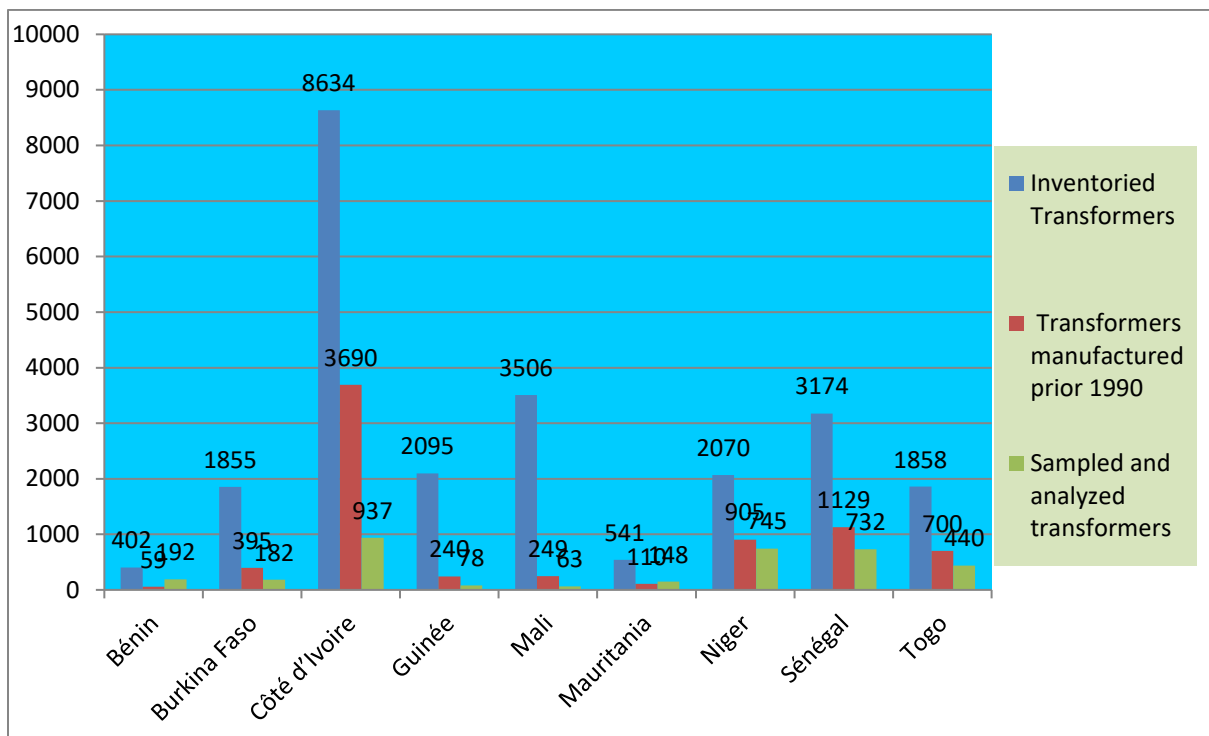
156. Evidence here as well indicates that the introduction of ESM, and related trainings and capacity building would not have been possible without the support of the Project. This strengthened administrative capacity at the level of inspectors, and customs officers supported by a strong legislative framework – and eventually backed up by financial mechanisms – and the resulting and high levels of awareness, management and monitoring from utilities, - fully utilizing management and tracking systems for PCBs - have the potential to deliver this Outcome as a result of the Project.
157. As detailed in the Project Document and evidenced during the evaluation, there is a large population of transformers in the participating countries (estimated at approximately 25,000 units in the Project Document and confirmed at 24,135 by the inventories). The statistical assessment<sup>3</sup> of national PCB inventory data completed at time of preparation of the Project Document indicated that the participating countries held an estimated 4,260 transformers containing pure PCBs with an approximate total weight of 3,071 tonnes including an estimated 921 tonnes of PCBs. In addition, the assessment estimated the presence of a further 15,874 transformers in which the dielectric fluid (mineral oil) was contaminated at a level greater than 50ppm PCB. The estimated total weight of these transformers was 11,445 tonnes including 2,632 tonnes of PCB contaminated oil.
158. The capacity to account for transformers (inventories and database) is however not a static endeavor, and interview data indicates that although the base system is considered adequate, this will require to be kept up to date and most importantly, will require that further parameters be included, such as geo-localization of equipment. The Evaluator was informed, in all of the countries visited, that unless decommissioned transformers are rapidly removed for safe storage, they will be recycled by the informal sector, sometimes very rapidly. In addition, when field intervention teams remove these transformers, they are simply set aside next to the intervention site and often forgotten, as they are not in general referenced.

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<sup>46</sup> Political instability, Ebola outbreak, Ministerial level changes (one country changed Ministers 5 times in as many years)

159. As can be seen from the figure below, there is a large population of transformers that have not yet been sampled and analyzed. It also appears very clearly from this figure that a significant number of these were manufactured prior to 1990, generally considered to be an indicator for the presence of PCBs.

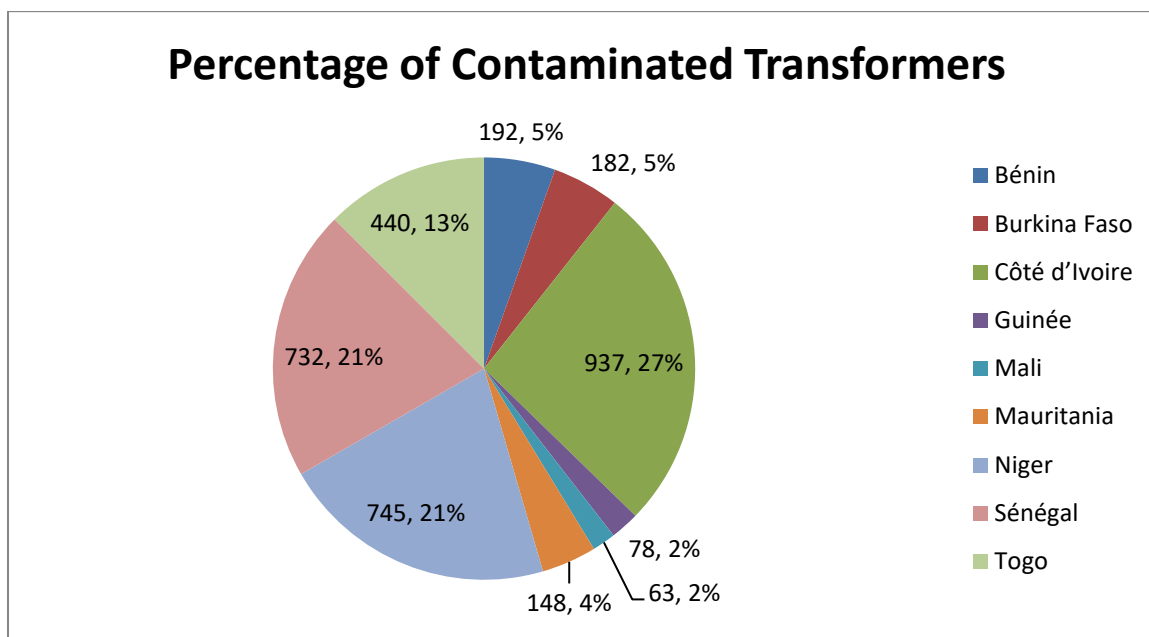
Figure 1 - Transformers per Country



160. Although as a result of the Projects' interventions ESM practices are now being applied to PCB equipment in storage or out of order, this was not the case in the recent past, and in particular for transformers or equipment which are in service for which there is no systematic screening to identify PCB before maintenance or repair. This is of concern as regards electrical fluids regenerated without prior screening for PCBs. As a result, cross contamination of mineral dielectric oils by PCBs during maintenance and repair activities, is still a major concern, for example in remote regions. This issue is critical as the transformer population potentially cross-contaminated is considered to be very high from the start, and has continued growing unhampered, until recently.

161. As can be seen below, the range of potentially contaminated transformers per country varies from 2 to 21%, representing a significant quantity of oils that will have to be disposed of. This outcome can be considered as partially achieved, but as having laid the groundwork for major progress in a subsequent phase.

Figure 1- Contaminated Transformers (based on data from samples and analysis)



#### *Mechanisms for decommissioning effectively implemented and monitored*

162. The assessment undertaken during the preparatory phase of the Project indicated the presence of a significant number of very old transformers (older than 40 years) still in use. Electrical companies and other transformer owners delay the replacement of these old transformers- whether PCB contaminated or not - as they require high investments, which, very often, are not in line with power generation and electrification priorities. In addition these are also generally well beyond the economic capacities of the majority, if not all, of these companies.

163. Without access to additional sources of financing, countries and their respective utilities are considered to be highly unlikely to be able to decommission transformers in service, even if these are suspected of containing PCBs. In this sense there is both an opportunity and a challenge on the horizon as in a number of cases, and as was rightly pointed out in the Project Document, as energy demand grows, there is a need to modernize the power grids. This entails in most cases a change of voltage (for example from 6Kv to 30Kv) and will lead to decommissioning of large numbers of equipment. This in turn will require that all transformers on the soon to be obsolete grids be disposed of.

164. The following quote is from one interviewee, however this same sentiment was picked up in all interviews: "It is because of this Project that we have eliminated these transformers". This said, and as discussed in previous sections of this document, although the pilot was successfully completed, activities in support of the fleshing out and testing of the different financial mechanisms identified will only be undertaken as part of Phase 3 of the Project.

***High levels of awareness support ESM and elimination of open use and trade of PCB oils and equipment***

165. The totality of interviewed stakeholders expressed their deep satisfaction with the information and training received during the numerous meetings and workshops organized by the Project. These were considered an indispensable part of the intervention, and although every interviewed stakeholder agreed that these were considered to have been of very high quality, well organized and well attended, they were unanimously described as too short and dense to allow full assimilation of the information by the majority of participants. This was reportedly a concern repeatedly voiced during the Steering Committee Meetings, and which was never satisfactorily resolved, apparently for budgetary reasons.
166. Timing of the interventions was another voiced concern, and interviewed stakeholders suggested that it would be highly beneficial for future projects to consider raising awareness and capacities prior to engaging in data collection activities (such as inventories), which feeds in to one of the identified weaknesses of the Project (Intended result and causality).
167. Project Focal Points who participated in trainings, for example inventories, were in most cases actively involved in replicating their experience and whether formally or informally succeeded in furthering Project results. In one case, even if the Focal Point did not participate in the inventory related fieldwork, she was in charge of training others and explained, "I know how to do everything related to the inventories!"
168. Interview data – Staff of one of the utilities confided that "it was during the awareness raising workshops that [he] learned of these substances [PCBs] and I have shared this knowledge widely" through mission reports, meetings and other interactions with colleagues, both in country and in other countries.
169. Interviewed NGO representatives also viewed the projects interventions positively, expressing their high satisfaction with the organization of the workshops, as well as with level of attendance which included representatives of Health, Environment, Agriculture and Energy Ministries (including in some instances Ministers themselves), utilities, CSOs etc. One concern voiced by a representative of civil society concerns co-financing, which essentially penalizes this sector during project development, as they do not have the capacity to mobilize co-financing in support of project development.
170. Overall the Project is described as a success, as "many things changed in the participating countries", and "utilities became aware of their responsibilities and roles", and destruction of transformers and PCB oils did take place and was in general extensively picked up by the media. Awareness was also raised amongst the population, who in their great majority prior to this ignored the existence of PCBs.

171. The cross-fertilization mechanisms established have endured outside of the Project and there have reportedly been numerous occasions where technicians and managers have continued to exchange information with utilities from the other participating countries, and “this continues to this day”.
172. The paragraphs above argue in support of a high rating for achievement of these outcomes, given that they are the most important to attain the intermediate states i.e. Monitoring, compliance and enforcement of national regulations effective and on-going; and, Capacity for ESM of PCB in place and applied by utilities supports reduction of PCB stocks. As well, the Assumptions and Drivers supporting progress, and transition, from Outputs to Outcomes being in place, the rating for Achievement of Outcomes is Satisfactory.

***The rating for achievement of Outcomes is ‘Satisfactory’***

### 5.4.3 Likelihood of Impact

173. As detailed above, the direct Outcomes most important to the attainment of intermediate states have mostly been achieved: regulatory systems expected to be adopted, ESM capacity built and utilized by governments and in particular their energy providers (utilities), decommissioning and destruction of PCBs, and this with the awareness and support of the population. Assumptions and Drivers, respectively for progress from direct Outcomes, and to support transition from direct Outcomes to intermediate states are considered to hold partially, and finally, the Project has delivered substantial results, and indications are that most Outcomes will be reached or are likely to be achieved in the near future. Overall, the intermediate states are on the way to being achieved as the utilities are already – and even in the absence of approved regulatory texts – applying the principles of ESM and “voluntarily” decommissioning equipment and most importantly, reducing their PCB stocks, and therefore already contributing to the sought after reduction of releases of these substances.
174. In addition, intermediate states considers the fact that the measures designed to move towards the sustainable, effective and comprehensive enforcement of Stockholm Convention provisions are well under way<sup>47</sup>, and have produced some results. Evidence also demonstrates that there is a willingness to continue in this direction in all participating countries, however this is affected by national realities and capacities. As such the progress towards intermediate states is partially achieved.
175. Finally, as the Project has achieved some documented changes in reducing releases of PCBs, and is considered to be aligning itself to contribute to the reduction of environmental and health risks, the likelihood of impact is assessed, as per the Evaluation Criteria Matrix, as “Likely”.

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<sup>47</sup> This is one of the findings of the AFLDC Terminal Evaluation, which this Project is building on



***The rating for likelihood of Impact is 'Likely'***

### ***Key Factors affecting project***

176. Although satisfactory results have been achieved to date, it is evident that even if project objectives and components were clear, practical and seemed achievable within the expected time frame, external factors which could not have been anticipated severely affected efficient delivery and required the project to be extended on three occasions.

***Effectiveness rated 'Satisfactory' for delivery of Outputs and achievement of direct Outcomes. Likelihood of Impact rated "Likely"***

## **5.5 Financial Management**

### **5.5.1 Completeness of Financial Information**

177. The criteria for assessing completeness of financial information are set in the Evaluation Criteria Matrix and include 11 elements. For the purpose of this evaluation consideration is only given to the financial information at the project level provided by the executing agency to UN Environment.

178. The Evaluator was not made aware of any deficiencies as regards the completeness of financial information. High level project budgets by funding source were available for secured and unsecured funds sub criteria (a) and (b); as well as disbursement documents (c); detailed project budgets for secured funds (d); Project expenditure sheets were made available to the Evaluator up to March 2018. It is expected that project expenditure sheets will be made available to UN Environment upon project closure by the executing agency to ensure the release of their last installment (e).

179. Proof/report of delivery of in-kind contributions: the annual Project Implementation Reviews include some information about in-kind and cash co-finance, but this is incomplete, however additional information was made available to the Evaluator up to December 2017 (f).

180. The project was extended (no cost) and revised project work plans and budgets were submitted by the Executing Agency and approved by the Steering Committee (g); Partner legal agreements and amendments have been provided to the Evaluator (h); Disbursement (Funds Transfer) documents (cash statement) from UN Environment to the Partner have been made available to the Evaluator (i); audit reports have been made available to the Evaluator (j); and no information about management responses to audit reports was available (k).

181. Based on the above, and as per the Evaluation Criteria Matrix, as 50 to 99% of these criteria hold, the rating for completeness of financial information for the Project is "Moderately Satisfactory".

182. There is no evidence of any of the countries having provided cash co-finance. Based on the evidence, and considering that the countries are LDCs, the Evaluator considers that the expectation for cash co-finance was unrealistic, notwithstanding whether or not signed co-financing pledges had been obtained from the participating countries. However, although cash was not provided, the value of the recycled metals corresponded exactly to the co-financing amount that utilities were to provide; this recycling value was ceded to the company carrying out the destruction of the equipment.
183. Overall, and given the fact that the project has been extended thrice, which has obliged these countries to maintain their in-kind co-financing, this could very well end up representing a significant investment. The Evaluator can only hope that no effort will be spared to ensure that the figures yet to be provided in the final reports of the Executing Agency accurately reflect this.
184. Similarly the in-kind contribution of UN Environment from personnel (oversight, meetings, financial) is likely to have been more than originally expected, given the three no cost extensions. This information was not captured in the reports provided to the Evaluation Team.

#### 5.5.2 Communication between Finance and Project Management Staff

185. Evidence suggests that at least since 2015 with the appointment of the current Task Manager: the Task Manager has *strong awareness of* the current financial status of project; the FMO has *strong awareness of* overall project progress when financial disbursements are made; and there is *regular / frequent* contact between the Task Manager and FMO.
186. Evidence also suggests that although prior to 2015 financial issues might only have been addressed retrospectively when identified by senior management/staff external to the project team, thereafter they were raised and resolved proactively.
187. No evidence was available to assess whether both finance and project staff members, prior to submission, reviewed “all” narrative and financial reports. Notwithstanding this, the Evaluator rates Communication between Finance and Project Management Staff as “Satisfactory”.

***Financial Management rated “Satisfactory”***

#### 5.6 Efficiency

188. The Evaluator was not made aware of any concerns regarding cost effectiveness or costliness, and considers that although to date the project has not delivered all of the expected results, those achieved have been delivered at a reasonable cost.
189. Although the project is presently facing severe delays in its implementation and did not produce results within the initial time frame available (i.e. by April 2015), the Evaluator

considers that there are mitigating factors that partially account for this; these include a series of unforeseeable events, which effectively derailed project implementation and have contributed to a 3-year delay, and to relatively low operational efficiency.

190. The project as designed was to be implemented in 5 years, and outputs were sequenced to rely upon completion of others; delays in one area had an impact on others. The development of the “soft” activities under Phase 1 (legal framework, ESM, inventories etc.) was required prior to the implementation of Phase 2 (temporary storage sites, decommissioning and disposal). The delays in project implementation had negative impacts principally on main stakeholders, i.e. government, and public utilities – and contributed to a loss of drive and momentum.
191. The project was granted three no-cost extensions and is, at the time of drafting this report, struggling to complete expenditure of resources earmarked for the destruction activities, within the extended project timeframe. As regards completion of inventories however, a transfer of USD 171,900 from the AFLDC<sup>48</sup> Project did occur, as a result of “creative” decisions taken at the final AFLDC Project Steering Committee meeting in June 2017. At the time of the Terminal Evaluation however, and taking into consideration these no cost extensions, most of the activities have resulted in the intended outputs, even though this did not occur within the initially planned timeframes. As already mentioned, this is not a consequence of project design, but rather of the cascading effect of a series of un-planned and impossible to predict events.
192. UN Environment assisted the EA in strengthening financial project management and dispatched the Finance Assistant from the POPs/Chemical Management unit to Dakar in March 2013. Three days were spent with the CRCB team including the Director, Project Coordinator, and Project Accountant. A revised budget was prepared and submitted to the donor (FFEM) prior to submission of a project revision to the GEF for approval. Overall the mission concludes that the CRCBS “has done a very good job so far in project financial reporting”<sup>49</sup>.
193. The UN Environment Programme Officer, Chemicals and Waste MEAs Regional Coordinator, ROA and Finance Assistant from the POPs/Chemical Management unit participated in the Steering Committee Meeting in July 2013 in Abidjan. The Steering Committee aimed to assess progress, agree the work-plan and budget, and on the general way forward. The Steering Committee was informed of the financial situation and budget limitations in particular as regards effects of non-materialization of ADB co-finance, which caused un-necessary pressure on use of GEF funds. ROA was tasked with preparing a new request for financial contribution from the ADB to be submitted through the West African Economic and Monetary Union (WAEMU). This shortfall also affected the total amount available to cover the contract with TREDI, which the EA was tasked with

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<sup>48</sup> This Project was implemented in parallel in three sub regions of Africa, SADC, COMESA and ECOWAS. Its aim was to strengthen the capacities of countries to implement their NIPS, in support of the Stockholm Convention obligations

<sup>49</sup> UN Environment Mission Report

renegotiating<sup>50</sup>. The members of UN Environment staff also met with participating electric utilities.

194. The project had planned on establishing a regional treatment centre in Cote d'Ivoire (Abidjan), however a meeting between UN Environment staff, technical partners and the Minister of Environment, Urban Sanitation and Sustainable Development made it clear that the country would not allow the import of PCBs onto its territory<sup>51</sup>, a development that significantly affected the project. Further to this the EA, with the support of ROA were to liaise with other countries that could host the treatment centre and to consider other scenarii that could substitute for the installation of a centre.

195. Ultimately the non-participation of the African Development Bank and of the Islamic Development Bank were confirmed by the Director of the CRCBS in a letter sent to the UN Environment Senior Programme Officer and GEF Portfolio Manager of the Chemicals and Waste Branch, dated 31 March 2016.

196. The projects efficiency was compromised by a number of external factors and in addition, but to a different degree, by the withdrawal of 2 of the expected co-financing partners (ADB and IDB) as well as one co-executing Agency, the WAPP. The absence of the WAPP project management created an additional challenge, as it was not easy to work directly with utilities whose major concern is that of satisfying their customers, rather than responding to time-consuming requests that fail to deliver the promised results in a timely manner.

**Efficiency rated "Moderately Unsatisfactory"**

## 5.7 Monitoring and Reporting

### 5.7.1 Monitoring Design and Budgeting

197. The M&E for this Project was designed according to both the GEF and UN Environment's standard procedures for monitoring and evaluation in place at the time of project design (2009-2010). The logframe included "objectively verifiable indicators of achievements, sources and means of verification for the Project outcomes and outputs, and the timeframe for monitoring activities" were specified in the Projects' Monitoring and Evaluation Plans.

198. The organizational arrangements, responsibilities and structures for monitoring and reviewing/adapting progress of project implementation were specified in project documents. The Projects also identified a specific budget for M&E. This dedicated budget for monitoring covered monitoring activities; indicated data collection methods and

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<sup>50</sup> *Ibid.*

<sup>51</sup> *The is described as "sensitive in connection with the Probo Koala case" which in 2006 resulted in toxic waste being illegally dumped*

frequency and, included funds for a mid-term and a terminal evaluation. However, expenditure for monitoring and evaluation was not monitored against its budget.

### 5.7.2 Monitoring of Project Implementation and Reporting

199. Monitoring systems were put in place at the level of the Executing Agency, in line with its standards and evidence suggests that these allowed the person responsible for monitoring progress against indicators to track results and progress toward project objectives.
200. Monitoring of project progress is considered to have been adequate, given most indicators were at output level and easily tracked, however monitoring of performance (in terms of achievement of project outcomes and the overall project objective) was unavailable given inadequacy of indicators.
201. As mentioned above, the expended budget is considered to have been sufficient to carry out M&E activities as presented in the project documents and reporting requirements were largely fulfilled throughout the Projects life (it is yet to be determined if these will be fully completed as the Project is still in process of being completed). Quarterly expenditure reports and cash advance requests, 6-monthly progress reports and Project Implementation Reviews (PIRs) made available to the Evaluator appear to largely have been submitted as planned.
202. Overall PIRs provided weak reporting to track progress, and were overall incomplete. This is a missed opportunity to raise concerns at the level of the Implementing Agency. Detailed information regarding achievement of outcomes and project objectives is not included, and this is a result of the inadequacy of the logframes indicators, and their generally confused nature.
203. As part of the monitoring mechanisms, the Project Steering Committee was established and met 8 times during the life of the Project. The steering committee was effective at reviewing project performance and making decisions for future work plans and used in particular the Steering Committee Meetings to address issues and implement solutions, as required.
204. The Mid Term Review (MTR) carried out mid-2014 pointed out that the M&E system was effectively implemented and was as conceived in the Project document with semi-annual and quarterly progress reports regularly produced by the CRCB, as well as the annual Progress implementation Reviews (PIR).
205. The MTR points out that the logical framework indicators had not been systematically documented during the M&E process. Although the Evaluator does not consider, given the requirements in place at time of design of the project, that there are any significant weaknesses in monitoring design or budgeting, as pointed out previously the indicators were reviewed and are not considered to be SMART enough to accurately allow for the tracking of progress towards the achievement of project outputs, nor outcomes. This

lack of clarity hampered the effective monitoring of progress, however this was addressed subsequently, through the UN Environment's strong management redressing response.

### **Monitoring and Reporting rated 'Satisfactory'**

## **5.8 Sustainability**

206. Sustainability of the Project was evaluated using the UN Environment Evaluation Criteria Matrix (Criteria 8).

### **5.8.1 Socio-Political Sustainability**

207. The direct outcome of Component 1 is "National harmonized regulatory system adopted", and the Evaluator considers that socio-political sustainability in this case is highly likely. This is based on the fact that once the laws are adopted there is no dependency as regards this criterion. During the immediate period following project closure, before all laws have been adopted, there is a need for socio-political support, but given the evidence of high degree of ownership and direct alignment with national and international priorities, the Evaluator considers this to be Highly Likely (moderate dependency and 100% mitigation).

208. The direct outcome of Component 2 is "Regional and national capacity for ESM of PCBs in place and applied by utilities" and socio-political sustainability in this case is considered highly likely. The sustainability of this outcome is considered to have a low, to no degree of dependency on socio-political factors, and high mitigation; as is the case for the Laws, once these processes have been set in motion i.e. once ESM is part of the management fabric, it is highly likely it will continue to be applied, in particular given the high levels of ownership. In addition, once awareness has been built, i.e. when the dangers have become apparent and the steps to avoid them are evident, it is highly likely that interest and commitment will be maintained.

209. The direct outcome of Component 3 is "Mechanisms for decommissioning effectively implemented and monitored", which is assessed as having a moderate to low dependency and high mitigation. Once the business plans enter the implementation phase, and business models are effectively implemented, the combined legislative push, in association with the opportunities presented to modernize power grids at a subsidized or low cost will be triggered. This mechanism is considered to have a low degree of sensitivity to social/political factors. In addition, the sustainable financing mechanisms Output directly feeds into this outcome as well; although it is not possible to ascertain they will be successfully put in place, at this stage it is considered likely. This further supports the above assessment as regards the high mitigation and supports a rating of highly likely.

210. The direct outcome of Component 4 is "high levels of awareness support ESM and elimination of open use and trade of PCB oils and equipment". This is also not linked to

socio/political factors, for reasons similar to those mentioned above i.e. it is unlikely that once ESM has been collectively understood as the way to minimize exposure and reduce risks, a reversal is doubtful. Again, there is here a moderate to high degree of mitigation as there is strong ownership, interest and commitment from government stakeholders, which would support an assessment of highly likely.

211. Overall this averages as “Highly Likely” for all Components.

### 5.8.2 Financial Sustainability

212. The continuity of the Project depends on the commitment of the countries and their utilities to provide the necessary long-term resources both financial and human. In strict financial terms, sustainability, after GEF involvement ceases, will depend on the importance attached to compliance with the obligations contracted as signatories to the Stockholm Convention. It is also clear that any future actions related to the modernization of the power grids will require substantive amounts of funding, which at least in part will have to be provided by the countries.

213. In the course of the interviews with stakeholders the Evaluator documented clear expressions of support for a Phase 3 of the Project, particularly in light of the realization of the quantities of PCBs still to be phased out, and also of the sizeable investments required to change functional and connected equipment. However, at this stage financial instruments (mitigating measures) are not in place to ensure the access to sustainable resource flows; and this affects components in a different manner.

214. Component 1 has low dependency on financial resources, as once the laws have been adopted countries have demonstrated that they have sufficient resources and motivation to fund the final steps to support the adoption process. Therefore there is a low dependency and at this stage, a minimum 75% mitigation, which would rate this as Highly Likely.

215. Components 2 and 4 have a low dependency on financial resources. As previously argued, once ESM capacities and awareness have been built and the approach validated as practicable and coherent, a reversal is highly unlikely. In particular, as the uptake for ESM has been achieved at the decision making and management levels of utilities, and as capacities on the ground have been built and awareness has been raised, it is considered that these outcomes have a low dependency, and a 75-100% mitigation and are therefore highly likely to continue.

216. Component 3 – The sustainability of the outcome related to this component links decommissioning mechanisms and effective implementation. This is considered likely to happen but only if the financial mechanisms developed under Component 2 are successfully rolled out in Phase 3 of the Project. As mentioned previously, although it is not possible to ascertain that this will take place, it is considered likely, therefore assessment for this criteria and for this component is that of moderate dependency, with

50-75% mitigation as an exit strategy with a financial component has been initiated; the rating is therefore of Likely.

217. Component 4 – Awareness has been raised for all stakeholder groups, however to avoid regression there is a moderate dependency on future funding as these trainings must be extended well beyond the capital cities. This said civil society organizations and Ministry outreach activities (in some of the more active countries) have the potential to support limited mitigation measures. This is therefore rated Moderately Unlikely.

218. Overall this averages as “Likely” for all Components.

### 5.8.3 Institutional Sustainability

219. Components 1, 2 and 4 have moderate to low dependency on institutions. The laws have entered the approval processes and countries have demonstrated that they have sufficient motivation to support adoption (low dependency); and, high ownership levels for adoption of ESM by utilities are demonstrated, as well as for awareness in support of ESM (moderate dependency). Given sustainability of these outcomes has a moderate to low dependency on/or sensitivity to institutional support, and as mechanisms are in place to support the institutionalization of direct outcomes, and capacities of relevant individuals have been enhanced and are being exercised (75-100% mitigation), this is assessed as highly likely.

220. Component 3 – Mechanisms for decommissioning. This shows a low dependency on institutional sustainability, provided that the financial mechanisms developed under Component 1 become a reality in Phase 3. As at this stage it is impossible to determine whether this will occur, but taking into consideration the successful completion of the Pilot, as well as the fact that this is being included in the development of the PIF for Phase 3 of the Project, the Evaluator estimates that this can be considered likely to occur.

221. However, if the expected financial mechanisms in support of the decommissioning of large numbers of transformers do not materialize, then institutions will be required to directly assume this as part of the Obligations under the Stockholm Convention. This would then indicate a high to moderate dependency, with average to low mitigation (as utilities would still have the means to finance part of these changes through increased tariffs or taxes). **The assessment rating would then be unlikely. The average of these two is then moderately likely** and will be used to calculate the average, below.

222. Overall this indicates that it is likely that this will occur.

***Sustainability rated 'Likely'***



## 6 Conclusions and Recommendations

### 6.1 Conclusions

<b>Conclusion 1</b>	<b>Moving forward</b>
	<b>Recommendation 1:</b>
The Project has delivered results, but these are far from what was initially planned for, or required to fully address the elimination of PCB'S	Phase 3 of the Project should be urgently finalized and implemented, this will ensure that the momentum gained is built upon, and that the large remaining stockpiles of PCBs (in equipment and as oils) are effectively disposed of
<b>Contributing Conclusions</b>	<b>Supportive recommendations:</b>
There is a risk that without continued support, countries will not be able to comply with their obligations under the Stockholm Convention	Additional interventions should target completion of inventories, geo-localization of equipment, continued building of capacities to address SC requirements, and access to financing for eventual disposal of PCB wastes
Trainings needs have not fully been met; successes should be furthered, to ensure long lasting results. What has been achieved is appreciated, but needs remain. Trainings should be more in depth, so that information can be fully comprehended and mastered, in support of replication	The success of future interventions requires that reproducible training capacities be firmly established, ensuring results from this intervention are long lasting
<b>Conclusion 2</b>	<b>Learning for success</b>
	<b>Recommendation 2:</b>
One size fits all regional approach has merits, but has created high levels of dissatisfaction	National interventions, under a regional overarching umbrella, should always strive to closely match the individual client countries priorities, and most importantly, needs.
<b>Contributing Conclusions</b>	<b>Supportive recommendations:</b>
Even in a regional approach, efforts must be made to take into account and reflect on the realities of individual countries	There are advantages to the regional approach, such as facilitation of cross-fertilization and South-South cooperation, however challenges inherent to individual country realities must be at the forefront of any intervention

**Table 5: Ratings Table**

<b>Criterion</b>	<b>Summary Assessment</b>	<b>Rating</b>
<b>A. Strategic Relevance</b>	<b>Considered highly relevant by all sectors</b>	<b>HS</b>
<i>1. Alignment to MTS and POW</i>	Yes, there is demonstrated alignment	Highly Satisfactory
<i>2. Alignment to UN Environment /Donor/GEF strategic priorities</i>	Yes, there is demonstrated alignment	Highly Satisfactory
<i>3. Relevance to regional, sub-regional and national environmental priorities</i>	Yes, there is demonstrated relevance, however some frustrations exist which must be addressed in future interventions	Highly Satisfactory
<i>4. Complementarity with existing interventions</i>	Yes, designed to be complementary	Highly Satisfactory
<b>B. Quality of Project Design</b>	<b>As per the standards of the time, however weaknesses identified</b>	<b>Moderately Satisfactory</b>
<b>C. Nature of External Context</b>	Not considered to have had a significant impact on project implementation	<b>Moderately Favourable</b>
<b>D. Effectiveness<sup>52</sup></b>	Internal and external factors affected this	<b>Satisfactory</b>
<i>1. Delivery of outputs</i>		Satisfactory
<i>2. Achievement of direct outcomes</i>	Would not have occurred without projects' support, however there are some shortfalls – however Project is not completed at time of TE	Satisfactory
<i>3. Likelihood of impact</i>	No documented changes at this stage, however significant progress noted	Likely

<sup>52</sup> Where a project is rated, through the assessment of Project Design Quality template during the evaluation inception stage, as facing either an Unfavourable or Highly Unfavourable external operating context, ratings for Effectiveness, Efficiency and/or Sustainability may be increased at the discretion of the Evaluation Consultant and Evaluation Manager together.

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<b>Criterion</b>	<b>Summary Assessment</b>	<b>Rating</b>
<b>E. Financial Management</b>	No major shortfalls noted	<b>Satisfactory</b>
<i>1. Completeness of project financial information</i>		Moderately Satisfactory
<i>2. Communication between finance and project management staff</i>		Satisfactory
<b>F. Efficiency</b>	No major concerns, however three no cost extensions subsequent to unforeseen circumstances	<b>Moderately Unsatisfactory</b>
<b>G. Monitoring and Reporting</b>	Data available, and mostly complete	<b>Satisfactory</b>
<i>1. Monitoring design and budgeting</i>		Satisfactory
<i>2. Monitoring of project implementation</i>		Satisfactory
<i>3. Project reporting</i>		Satisfactory
<b>H. Sustainability</b>		<b>Likely</b>
<i>1. Socio-political sustainability</i>	No major concerns noted	Highly Likely
<i>2. Financial sustainability</i>	Highly dependent on as of yet unsecured future funding	Likely
<i>3. Institutional sustainability</i>	Knowledge has been internalized and is likely to remain	Likely
<b>I. Factors Affecting Performance<sup>53</sup></b>		<b>Satisfactory</b>
<i>1. Preparation and readiness</i>	All elements were in place	Satisfactory
<i>2. Quality of project management and supervision<sup>54</sup></i>	Demonstrated adaptive management helped to maintain Project on track, despite challenges	Satisfactory
<i>3. Stakeholders participation and cooperation</i>	No major concerns	Satisfactory

<sup>53</sup> While ratings are required for each of these factors individually, they should be discussed within the Main Evaluation Report as cross-cutting issues as they relate to other criteria. Catalytic role, replication and scaling up should be discussed under effectiveness if they are a relevant part of the TOC.

<sup>54</sup> In some cases 'project management and supervision' will refer to the supervision and guidance provided by UN Environment to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the Executing Agency and the technical backstopping provided by UN Environment, as the Implementing Agency.

<b>Criterion</b>	<b>Summary Assessment</b>	<b>Rating</b>
<i>4. Responsiveness to human rights and gender equity</i>	Attempts were made at implementation	Satisfactory
<i>5. Country ownership and driven-ness</i>	No major concerns	Highly Satisfactory
<i>6. Communication and public awareness</i>	No major concerns	Satisfactory
<b>Overall Project Rating</b>		<b>Satisfactory</b>

## 6.2 Lessons Learned

223. Opportunities are easy to miss: decommissioned transformers that are not moved to storage sites rapidly will tend to vanish and estimates of stockpiles may in the end be lower than initially estimated;

224. Access to sources of financing – countries and in particular their electricity generators and providers (utilities) are highly unlikely to decommission functional equipment, even if they are known to contain PCBs, without a strong incentive to do so (grants, subsidies, loans);

225. Timing of interventions is essential to ensure success, for example awareness raising activities, generally the last component before management, should not be implemented sequentially. Raising awareness before, or in parallel, while data collection takes place contributes to success of interventions;

226. Timely use of adaptive management can significantly contribute to redressing a project, notwithstanding the severity of unforeseen events affecting its implementation;

227. Awareness has been raised, but to ensure good practices continue, countries and utilities must support the purchase and use of protective gear when handling PCBs

## Annexes

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### Annex 1 List of Documents Consulted

#### Project Design and Partner Agreements:

- UN Environment ProDoc and minutes from Project Review Committee meetings
- Project design documents
- Project Identification Form (PIF)
- Project revisions to the project design and/or extensions
- Partner agreements (Small Scale Fund Agreements, Partner Cooperation Agreements, UN-to-UN Agreements) and amendments
- Memoranda of Understanding relating to the project
- Legal agreements relating to the projects

#### Project Progress Reports:

- Project/country workplans, including revised versions
- Project monitoring plan, with associated budget
- Supervision/monitoring mission reports
- Steering Committee meeting documents, including agendas, meeting minutes and any summary reports
- Project progress reports, including regular reports to donors (both narrative and financial components)
- Annual Project Implementation Review reports (PIRs) and the GEF Tracking Tool for relevant Focal Areas
- Technical project reports
- Mid-Term Evaluation
- Recommendation Implementation Plans from any mid-point evaluation

#### Project Deliverables:

- Documents from inception meetings (including agendas, participants lists, powerpoint presentations, minutes etc)
- Country assessment/sector studies etc
- Training agendas and participant lists
- Project communications materials
- Links to relevant knowledge sharing platforms

#### Project Financial Management:

- High-level project budget (costs) for secured and unsecured funds.
- High-level project budget by funding source(s) for secured and unsecured funds.
- Detailed project budget (i.e. by result) for secured funds.
- Budget revisions, including for no-cost extensions
- Cash advance requests documenting disbursements Disbursement (Funds Transfer) documents (cash statement) from UN Environment to Partners.
- Disbursement (Funds Transfer) document from funding source(s) to UN Environment.
- Project expenditure sheet (to-date).
- Proof/report of delivery of in-kind contributions.

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- All available financial reports (i.e. UN Environment financial reports submitted internally or to donors and/or financial reports received from partners)
- Audit reports, (including Management Responses to audits)

## Annex 2 Stakeholders interviewed

Table 6: Stakeholders interviewed during evaluation missions or remotely

Country	Name	Gender	Institution	Role in Project
Guinea	Hawa Diallo	F	Ministere de l'Environnement	Conseillère juridique
Guinea	Assiatou Baldé	F	Ministere de l'Environnement	Ministre de l'Environnement
Guinea	Halimatou Tandeta Diallo	F	Secretaire executive conseil national environnement et developpement durable	Point Focal
Guinea	Ibrahima Sory Gordi Diallo	M	Douanes	Inspecteur
Guinea	Abou Cissé	M	Ministère de l'environement	Directeur de l'Environnement
Guinea	Algassimou Diallo	M	Ministère de la Justice	Procureur general adjoint
Guinea	Sekou Benna Kamara	M	Membre du parlement	Président Comission environnement et developpement durable de l'Assemblée nationale
Guinea	Mr Diallo	M	Membre du parlement	
Guinea	Mohamed Lamine	M	Membre du parlement	
Guinea	Hadjia Aissatou Bobo Diallo	F	Ministere de l'Industrie	Point Focal – produits chimiques
Guinea	Karamba Traore	M	Ministère de l'Industrie et des PME	Chef, Section transfert technologiques
Guinea	Abderahmane Diallo	M	Ministere des mines et de la géologie	Chef, chargé environnement et sécurité minière
Guinea	Kamory Traore	M	Ministere de l'Environnement	
Guinea	Mamdouba Camara	M	Ministere de l'Agriculture	
Guinea	Jules Tamba Camara	M	Institut Guinéen de normalisation et de métrologie	Chef, Section environnement
Mauritania	Sidi Ould Aloueimine	M	Environment Ministry - Director	Project Focal Point since 2017
Mauritania	Mohamed Lemine	M	Environment Ministry - Staff	Deputy to the Focal Point

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Country	Name	Gender	Institution	Role in Project
Mauritania	Fatimetou Mohamed Salek	F	NGO	Has been invited as member of the National Steering Committee
Mauritania	Abdel Kerim Aw	M	Principal Inspector – Customs Directorate	Participated in Customs and Judiciary trainings (Bamako and Nouakchott)
Niger	Seydou Moussa Ali	M	Direction Environnement et prevention des risques	
Niger	Hadidjatou Isoufou	F	Ministère de l'Environnement	Chef de division, prevention du risque
Niger	Issa Adji	M	Ministère de l'Environnement	Commandant
Niger	Boubacar Moussa Soumey	M	Ministère de l'Environnement	Chef division norms et politiques environnementales
Niger	Abdou Baou Ibrahim	M	Centre national de lute antiacridienne	Direction du suivi environnemental et sanitaire
Niger	Abdoulaye Mahama	M	Centre national de lute antiacridienne	Chef, Direction du suivi environnemental et sanitaire
Niger	Marou Gourouza	M	Universite Abdou Moumouni	Maitre de conférence
Niger	Gougari Bague	M	Direction des etudes biologiques	Direction générale de protection des végétaux
Niger	Alimatou Douki Abdou	F	Directrice	Reglementation et suivi phytosanitaire
Niger	Maina Maman Rabiou	M	Président - Assemblée Nationale	Parlementaire
Niger	Amadou Manzo Liman	M	Assemblée Nationale	Parlementaire
Niger	Ahmat Souleymane	M	Assemblée Nationale	Parlementaire
Niger	Labaram Yahaya	M	Assemblée Nationale	Parlementaire
Niger	Saley Hamani	M	Assemblée Nationale	Parlementaire
Niger	Issiya Soulé	M	Division hygiene publique et education pour la santé	Chef, Police sanitaire
Niger	Mahaman Laouali Abdou	M	ONEN – Organisation Nigerienne des éducateurs novateurs	Chef, projet collecte et recyclage



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Country	Name	Gender	Institution	Role in Project
Niger	Abdoul Azis Mahamadou	M	Ministère de l'Environnement	Directeur de la Legislation
Niger	Ahamadou Zaroumeye	M	Douanes, Point Focal du Ministère de l'environnement	Inspecteur Général
Niger	Issa Wassey	M	Ministere de la Justice	Directeur de la legislation et des réformes
Niger	Ouseini Soumana	M	Ministère de Ministère de la santé et de l'hygiène publique	Chef Division hygiène publique
Niger	Hamadou Cisse Mamoudou	M	Ministère de Ministère de la santé et de l'hygiène publique	Chef Bureau santé et environnement
Niger	Boubacar Goubokoye	M	Ministère de Ministère de la santé et de l'hygiène publique	Division hygiène publique
Niger	Mr Sani	M	Ministère de l'Environnement	Point Focal
Senegal	Massamba NDOUR	M	Basel and Stockholm Convention Regional Centre	Project Manager of ECOWAS PCB project
Senegal	Aita Seck	F	Direction de l'environnement et des Etablissements Classés	National Focal Point for POPs project
Senegal	Prof Ibrahima Ly	M	Legal Consultant	Translated toolkit and delivered regional SC training
Senegal	Papa sam GUEYE	M	Fondation Ceres Locustox and chair of the national committee for chemical management	Participated in review of legislation
Senegal	Bintou Waly FALL SENE	F	Direction de la Protection des Végétaux	Participant in regional training for inspectors and led national trainings
Senegal	Rohay Diop	F	Consultant	Facilitated national trainings for vulnerable groups (with PAN Afrique)

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Country	Name	Gender	Institution	Role in Project
Senegal	Khadim NDIAYE	M	Direction de l'Environnement	Participant in CIEN training
Senegal	Ampa F. DIENG	M	Direction Générale des Douanes	Participated in regional TOT for Customs and facilitated national training
Senegal	Abou Thiam Maïmouna DIENE	M F	PAN Afrique	Head of NGO contracted to undertake training of national NGOs for sensitization of vulnerable groups and training of teachers
Senegal	Fatou Bocoum Tiné Ndoye Ndième Ndiaye	F F F	Réseau Femmes Rurales	Undertook national vulnerable community sensitization
Senegal	Diop Dramme Diop	F	Coordinatrice de Cellule Juridique	Developed national legislation
Senegal	Coumba Diom	F	BSCRC	Finance officer
Sao Tomé and Príncipe	Sulisa Signo Bom Jesus Quaresma	F	Direcção de Conservação, Saneamento e Qualidade do Ambiente (DCSQA)	Project Focal Point
Sao Tomé and Príncipe	Victor Bonfim Do Sacramento	M	Direcção de Conservação, Saneamento e Qualidade do Ambiente (DCSQA)	SC focal point and participant in inception meeting and TOTs for CIEN
Sao Tomé and Príncipe	Nilton Garrido	M	Direcção Do Planeamento Agrícola, Ministry of Agriculture	Ministry of Agriculture counterpart for coordination of the inventory
Sao Tomé and Príncipe	Juliao Pinto Miguel des Santos Fernando Candô	M M M	Polícia Fiscal Aduaneira	Participant in national Customs training
Sao Tomé and Príncipe	Osvaldo Espirito Santo	M	Direcção Geral das Alfandegas	Participant in regional customs training in Bamako
Sao Tomé and Príncipe	Mikhail Saraiva Keynesmênio Neto Marigese Rita	M M F	ONG OQUIMAMB Organização da Química Ambiental de Sao Tomé e Príncipe	Participated in national Phytosanitary and Environmental, and economic and health inspectors training – 29-30 March 2017

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Country	Name	Gender	Institution	Role in Project
Sao Tomé and Príncipe	Gelsa Vera Cruz Miriam Matias	F F	Técnicas da Direcção do Ambiente	Participants in national Environmental inspector training 29-30/3/17
Sao Tomé and Príncipe	Andre Varela, President and various members of staff	M	district council of Lemba	Participants in national local government training
Sao Tomé and Príncipe	Eanes Cravid	M	Inspector Geral do Trabalho Ministry of Works	Participana tin national inspection training
Sao Tomé and Príncipe	Charles Género	M	Financial and Administrative Director of Ministry of Infrastructure, Natural Resources and Environment	Financial management of the project (signed the financial reports)
Sao Tomé and Príncipe	Osvaldo Bonfim Jaciley Costa	M F	Técnicos do CIAT	Participants of national inspection training
Sao Tomé and Príncipe	Adjelcínia Major Neto	F	Legal Officer Ministry of Justice	Participant in regional judiciary training 4 – 5 Aug. 2016 Dakar, Senegal
Sao Tomé and Príncipe	Kassi Costa	F	Ministry of Environment	Participant in regional inventory training in Bamako January 2017
Sao Tomé and Príncipe	Juvenal Bonfim	M	Ministry of Agriculture	Participant in regional inventory training in Bamako January 2017
Sao Tomé and Príncipe	Abnilde Lima	M	Geographer Ministry of Environment	Participant in regional CIEN training
Sao Tomé and Príncipe	Darnel Baia	M	Chemist Consultant	Consultant for the development of the national law on chemicals and wastes
Sao Tomé and Príncipe	Aline Castro	F	DGA	Chair of the National Committee for Chemicals Management (CNGQ)
Sao Tomé and Príncipe	Ms Constantina Oliveira	F	DGA	Member of Chair of the National Committee for Chemicals Management (CNGQ)

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Country	Name	Gender	Institution	Role in Project
Sao Tomé and Príncipe	Antónia Júnior	F	Ministry of Health	Member of Chair of the National Committee for Chemicals Management (CNGQ)
Sao Tomé and Príncipe	Arlindo T. Pereira	M	Chamber of Commerce	Member of Chair of the National Committee for Chemicals Management (CNGQ)
Sao Tomé and Príncipe	Felisberto Pimentel	M	Industry Directorate, Min of Trade	Member of Chair of the National Committee for Chemicals Management (CNGQ)
Sao Tomé and Príncipe	Luís Neto	M	CONPREC (disaster prevention and resilience)	Member of Chair of the National Committee for Chemicals Management (CNGQ)
Sao Tomé and Príncipe	Wanderley Rodrigues	M	DRCAE Inspection of Economic activities Direction de regulation e control de actividades economica	Member of Chair of the National Committee for Chemicals Management (CNGQ)
Sao Tomé and Príncipe	Osvalda Santos	F	Ministry of Local Government (Decentralization)	Member of Chair of the National Committee for Chemicals Management (CNGQ)
Sao Tomé and Príncipe	Adelino Pereira	M	Consultant	Elaborated the draft chemicals regulations
Sao Tomé and Príncipe	Lourenço de Jesus Monteiro	M	Ministry of Environment	GEF focal point
Sao Tomé and Príncipe	Oswaldo Lombá Paulo Jorge César	M M	Staff of Enaport – import agency	Participants in national inspection training

## Annex 3. Terms of Reference for the Evaluation

### TERMS OF REFERENCE [excluding project background section]

#### Terminal Evaluation of the UN Environment/Global Environment Facility project “Demonstration of a regional approach to environmentally sound management of PCB liquid wastes and transformers and capacitors containing PCBs”

#### 1. Key Evaluation principles

1. Evaluation findings and judgements should be based on **sound evidence and analysis**, clearly documented in the Evaluation report. Information will be triangulated (i.e. verified from different sources) as far as possible, and when verification is not possible, the single source will be mentioned (whilst anonymity is still protected). Analysis leading to evaluative judgements should always be clearly spelled out.
2. **The “Why?” Question.** As this is a terminal Evaluation and similar POPs related projects will be implemented in the region by UN Environment, particular attention should be given to learning from the experience. Therefore, the “Why?” question should be at the front of the consultants’ minds all through the Evaluation exercise and is supported by the use of a theory of change approach. This means that the consultants need to go beyond the assessment of “*what*” the project performance was, and make a serious effort to provide a deeper understanding of “*why*” the performance was as it was. This should provide the basis for the lessons that can be drawn from the project.
3. **Baselines and counterfactuals.** In attempting to attribute any outcomes and impacts to the project intervention, the evaluators should consider the difference between *what has happened with, and what would have happened without, the project*. This implies that there should be consideration of the baseline conditions, trends and counterfactuals in relation to the intended project outcomes and impacts. It also means that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project. Sometimes, adequate information on baseline conditions, trends or counterfactuals is lacking. In such cases this should be clearly highlighted by the evaluators, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.
4. **Communicating evaluation results.** A key aim of the evaluation is to encourage reflection and learning by UN Environment staff and key project stakeholders. The consultant should consider how reflection and learning can be promoted, both through the evaluation process and in the communication of evaluation findings and key lessons. Clear and concise writing is required on all evaluation deliverables. Draft and final versions of the main evaluation report will be shared with key stakeholders by the Task Manager. There may, however, be several intended audiences, each with different interests and needs regarding the report. The Task Manager will plan with the consultant(s) which audiences to target and the easiest and clearest way to communicate the key evaluation findings and lessons to them. This may include some or all of the following; a webinar, conference calls with relevant stakeholders, the preparation of a evaluation brief or interactive presentation.

## 2. Objective of the Evaluation

5. In line with the UN Environment Evaluation Policy<sup>55</sup> and the UN Environment Programme Manual<sup>56</sup>, the Terminal Evaluation (TR) is undertaken at completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UN Environment and main project partners. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation.

## 3. Key Strategic Questions

6. In addition to the evaluation criteria outlined in Section 10 below, the evaluation will address the **strategic questions** listed below. These are questions of interest to UN Environment and are based on materials collected during a mid-term review:

- (a) What are the key lessons concerning UN Environment and the engagement of the private sector? How could UN Environment enhance its operations together with the private sector especially in the West African region?
- (b) To what extent the regional approach to PCB management has proven to be effective and what are the key lessons concerning future chemicals projects applying similar regional approach?

## Evaluation Criteria

7. All evaluation criteria will be rated on a six-point scale. Sections A-I below, outline the scope of the criteria and a link to a table for recording the ratings is provided in Annex 1). A weightings table will be provided in excel format (link provided in Annex 1) to support the determination of an overall project rating. The set of evaluation criteria are grouped in nine categories: (A) Strategic Relevance; (B) Quality of Project Design; (C) Nature of External Context; (D) Effectiveness, which comprises assessments of the achievement of outputs, achievement of outcomes and likelihood of impact; (E) Financial Management; (F) Efficiency; (G) Monitoring and Reporting; (H) Sustainability; and (I) Factors Affecting Project Performance. The evaluation consultants can propose other evaluation criteria as deemed appropriate.

### A. **Strategic Relevance**

8. The evaluation will assess, in line with the OECD/DAC definition of relevance, *'the extent to which the activity is suited to the priorities and policies of the target group, recipient and donor'*. The evaluation will include an assessment of the project's relevance in relation to UN Environment's mandate and its alignment with UN Environment's policies and strategies at the time of project approval. Under strategic relevance an assessment of the complementarity of the project with other interventions addressing the needs of the same target groups will be made. This criterion comprises four elements:

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<sup>55</sup> <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

<sup>56</sup> [http://www.unep.org/QAS/Documents/UNEP\\_Programme\\_Manual\\_May\\_2013.pdf](http://www.unep.org/QAS/Documents/UNEP_Programme_Manual_May_2013.pdf) . *This manual is under revision.*

i. *Alignment to the UN Environment Medium Term Strategy<sup>57</sup> (MTS) and Programme of Work (POW)*

9. The evaluation should assess the project's alignment with the MTS and POW under which the project was approved and include reflections on the scale and scope of any contributions made to the planned results reflected in the relevant MTS and POW.

ii. *Alignment to UN Environment /GEF/Donor Strategic Priorities*

10. Donor, including GEF, strategic priorities will vary across interventions. UN Environment strategic priorities include the Bali Strategic Plan for Technology Support and Capacity Building<sup>58</sup> (BSP) and South-South Cooperation (S-SC). The BSP relates to the capacity of governments to: comply with international agreements and obligations at the national level; promote, facilitate and finance environmentally sound technologies and to strengthen frameworks for developing coherent international environmental policies. S-SC is regarded as the exchange of resources, technology and knowledge between developing countries. GEF priorities are specified in published programming priorities and focal area strategies.

iii. *Relevance to Regional, Sub-regional and National Environmental Priorities*

11. The evaluation will assess the extent to which the intervention is suited, or responding to, the stated environmental concerns and needs of the countries, sub-regions or regions where it is being implemented. Examples may include: national or sub-national development plans, poverty reduction strategies or National Implementation Plans or regional agreements etc.

iv. *Complementarity with Existing Interventions*

12. An assessment will be made of how well the project, either at design stage or during the project mobilization, took account of ongoing and planned initiatives (under the same sub-programme, other UN Environment sub-programmes, or being implemented by other agencies) that address similar needs of the same target groups. The evaluation will consider if the project team, in collaboration with Regional Offices and Sub-Programme Coordinators, made efforts to ensure their own intervention was complementary to other interventions, optimized any synergies and avoided duplication of effort. Examples may include UNDAFs or One UN programming. Linkages with other interventions should be described and instances where UN Environment's comparative advantage has been particularly well applied should be highlighted.

13. *Factors affecting this criterion may include:* stakeholders' participation and cooperation; responsiveness to human rights and gender equity and country ownership and driven-ness.

**B. Quality of Project Design**

14. The quality of project design is assessed using an agreed template during the evaluation inception phase, ratings are attributed to identified criteria and an overall Project Design Quality rating is established. This overall Project Design Quality rating is entered in the final evaluation ratings table as

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<sup>57</sup> UN Environment's Medium Term Strategy (MTS) is a document that guides UN Environment's programme planning over a four-year period. It identifies UN Environment's thematic priorities, known as Sub-programmes (SP), and sets out the desired outcomes, known as Expected Accomplishments (EAs), of the Sub-programmes.

<sup>58</sup> <http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf>

item B. In the Main Evaluation Report a summary of the project's strengths and weaknesses at design stage is included.

15. *Factors affecting this criterion* may include (at the design stage): stakeholders participation and cooperation and responsiveness to human rights and gender equity, including the extent to which relevant actions are adequately budgeted for.

### **C. Nature of External Context**

16. At evaluation inception stage a rating is established for the project's external operating context (considering the prevalence of conflict, natural disasters and political upheaval). This rating is entered in the final evaluation ratings table as item C. Where a project has been rated as facing either an Unfavourable or Highly Unfavourable external operating context, the overall rating for Effectiveness may be increased at the discretion of the Evaluation Consultant and Task Manager together. A justification for such an increase must be given.

### **D. Effectiveness**

17. The evaluation will assess effectiveness across three dimensions: achievement of outputs, achievement of direct outcomes and likelihood of impact. The evaluation will focus on the effectiveness in terms of demonstrative and regional approaches as described in the ProDoc and other project documentation.

#### ***i. Achievement of Outputs***

18. The evaluation will assess the project's success in producing the programmed outputs (products and services delivered by the project itself) and achieving milestones as per the project design document (ProDoc). Any *formal* modifications/revisions made during project implementation will be considered part of the project design. Where the project outputs are inappropriately or inaccurately stated in the ProDoc, a table should, for transparency, be provided showing the original formulation and the amended version. The achievement of outputs will be assessed in terms of both quantity and quality, and the assessment will consider their usefulness and the timeliness of their delivery. The evaluation will briefly explain the reasons behind the success or shortcomings of the project in delivering its programmed outputs and meeting expected quality standards. The evaluation will

19. *Factors affecting this criterion may include:* preparation and readiness and quality of project management and supervision<sup>59</sup>.

#### ***ii. Achievement of Direct Outcomes***

20. The achievement of direct outcomes is assessed as performance against the direct outcomes as defined in the reconstructed<sup>60</sup> Theory of Change (TOC). These are the first-level outcomes expected to be

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<sup>59</sup> In some cases 'project management and supervision' will refer to the supervision and guidance provided by UN Environment to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UN Environment.

<sup>60</sup> UN Environment staff are currently required to submit a Theory of Change with all submitted project designs. The level of 'reconstruction' needed during an evaluation will depend on the quality of this initial TOC, the time that has lapsed between project design and implementation (which may be related to securing and disbursing funds) and the level of any changes made to the project design. In the case of projects pre-dating 2013 the intervention logic is



achieved as an immediate result of project outputs. As in 1, above, a table can be used where substantive amendments to the formulation of direct outcomes as necessary. The evaluation should report evidence of attribution between UN Environment's intervention and the direct outcomes. In cases of normative work or where several actors are collaborating to achieve common outcomes, evidence of the nature and magnitude of UN Environment's contribution should be included.

21. *Factors affecting this criterion may include:* quality of project management and supervision; stakeholders' participation and cooperation; responsiveness to human rights and gender equity and communication and public awareness.

**iii. Likelihood of Impact**

22. Based on the articulation of longer term effects in the reconstructed TOC (i.e. from direct outcomes, via intermediate states, to impact), the evaluation will assess the likelihood of the intended, positive impacts becoming a reality. Project objectives or goals should be incorporated in the TOC, possibly as intermediate states or long term impacts. The Evaluation Office's approach to the use of TOC in project evaluations is outlined in a guidance note available on the EOU website, [web.unep.org/evaluation](http://web.unep.org/evaluation) and is supported by an excel-based flow chart called, Likelihood of Impact Assessment (see Annex 1). Essentially the approach follows a 'likelihood tree' from direct outcomes to impacts, taking account of whether the assumptions and drivers identified in the reconstructed TOC held. Any unintended positive effects should also be identified and their causal linkages to the intended impact described.

23. The evaluation will also consider the likelihood that the intervention may lead, or contribute to, unintended negative effects. Some of these potential negative effects may have been identified in the project design as risks or as part of the analysis of Environmental, Social and Economic Safeguards.<sup>61</sup>

24. The evaluation will consider the extent to which the project has played a catalytic role or has promoted scaling up and/or replication<sup>62</sup> as part of its Theory of Change and as factors that are likely to contribute to longer term impact. Ultimately UN Environment and all its partners aim to bring about benefits to the environment and human well-being. Few projects are likely to have impact statements that reflect such long-term or broad-based changes. However, the evaluation will assess the likelihood of the project to make a substantive contribution to the high level changes represented by UN Environment's Expected Accomplishments, the Sustainable Development Goals<sup>63</sup> and/or the high level results prioritised by the funding partner.

25. *Factors affecting this criterion may include:* quality of project management and supervision, including adaptive project management; stakeholders participation and cooperation; responsiveness to human rights and gender equity; country ownership and driven-ness and communication and public awareness.

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often represented in a logical framework and a TOC will need to be constructed in the inception stage of the evaluation.

<sup>61</sup> Further information on Environmental, Social and Economic Safeguards (ESES) can be found at <http://www.unep.org/about/eses/>

<sup>62</sup> *Scaling up* refers to approaches being adopted on a much larger scale, but in a very similar context. Scaling up is often the longer term objective of pilot initiatives. *Replication* refers to approaches being repeated or lessons being explicitly applied in new/different contexts e.g. other geographic areas, different target group etc. Effective replication typically requires some form of revision or adaptation to the new context. It is possible to replicate at either the same or a different scale.

<sup>63</sup> A list of relevant SDGs is available on the EO website [www.unep.org/evaluation](http://www.unep.org/evaluation)

### **E. Financial Management**

26. Financial management will be assessed under three broad themes: completeness of financial information, communication between financial and project management staff and compliance with relevant UN financial management standards and procedures. The evaluation will establish the actual spend across the life of the project of funds secured from all donors. This expenditure will be reported, where possible, at output level and will be compared with the approved budget. The evaluation will assess the level of communication between the Task Manager and the Fund Management Officer as it relates to the effective delivery of the planned project and the needs of a responsive, adaptive management approach. The evaluation will verify the application of proper financial management standards and adherence to UN Environment's financial management policies. Any financial management issues that have affected the timely delivery of the project or the quality of its performance will be highlighted. This evaluation will also look at to what extent the mid-term review related recommendations have been addressed.

27. *Factors affecting this criterion may include:* preparation and readiness and quality of project management and supervision.

### **F. Efficiency**

28. In keeping with the OECD/DAC definition of efficiency, the evaluation will assess the cost-effectiveness and timeliness of project execution. Focusing on the translation of inputs into outputs, cost-effectiveness is the extent to which an intervention has achieved, or is expected to achieve, its results at the lowest possible cost. Timeliness refers to whether planned activities were delivered according to expected timeframes as well as whether events were sequenced efficiently. The evaluation will also assess to what extent any project extension could have been avoided through stronger project management and identify any negative impacts caused by project delays or extensions. The evaluation will describe any cost or time-saving measures put in place to maximise results within the secured budget and agreed project timeframe and consider whether the project was implemented in the most efficient way compared to alternative interventions or approaches.

29. The evaluation will give special attention to efforts by the project teams to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency. The evaluation will also consider the extent to which the management of the project minimised UN Environment's environmental footprint.

30. *Factors affecting this criterion may include:* preparation and readiness (e.g. timeliness); quality of project management and supervision and stakeholders participation and cooperation.

### **G. Monitoring and Reporting**

31. The evaluation will assess monitoring and reporting across three sub-categories: monitoring design and budgeting, monitoring of project implementation and project reporting.

#### *i. Monitoring Design and Budgeting*

32. Each project should be supported by a sound monitoring plan that is designed to track progress against SMART<sup>64</sup> indicators towards the achievement of the projects outputs and direct outcomes,

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<sup>64</sup> SMART refers to indicators that are specific, measurable, assignable, realistic and time-specific.

including at a level disaggregated by gender or groups with low representation. The evaluation will assess the quality of the design of the monitoring plan as well as the funds allocated for its implementation. The adequacy of resources for mid-term and terminal evaluation should be discussed if applicable.

*ii. Monitoring of Project Implementation*

33. The evaluation will assess whether the monitoring system was operational and facilitated the timely tracking of results and progress towards projects objectives throughout the project implementation period. It will also consider how information generated by the monitoring system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensure sustainability. The evaluation should confirm that funds allocated for monitoring were used to support this activity.

*iii. Project Reporting*

34. UN Environment has a centralised Project Information Management System (PIMS) in which project managers upload six-monthly status reports against agreed project milestones. This information will be provided to the Evaluation Consultant(s) by the Task Manager. Projects funded by GEF have specific evaluation/evaluation requirements with regard to verifying documentation and reporting (i.e. the Project Implementation Reviews, Tracking Tool and CEO Endorsement template<sup>65</sup>), which will be made available by the Task Manager. The evaluation will assess the extent to which both UN Environment and donor reporting commitments have been fulfilled.

35. *Factors affecting this criterion may include:* quality of project management and supervision and responsiveness to human rights and gender equity (e.g. disaggregated indicators and data).

***H. Sustainability***

36. Sustainability is understood as the probability of direct outcomes being maintained and developed after the close of the intervention and how these results are likely to support the future management of the PCBs in the region. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of achieved direct outcomes. Some factors of sustainability may be embedded in the project design and implementation approaches while others may be contextual circumstances or conditions that evolve over the life of the intervention. Where applicable an assessment of bio-physical factors that may affect the sustainability of direct outcomes may also be included.

*i. Socio-political Sustainability*

37. The evaluation will assess the extent to which social or political factors support the continuation and further development of project direct outcomes. It will consider the level of ownership, interest and commitment among government and other stakeholders to take the project achievements forwards. In particular the evaluation will consider whether individual capacity development efforts are likely to be sustained.

*ii. Financial Sustainability*

38. Some direct outcomes, once achieved, do not require further financial inputs, e.g. the adoption of a revised policy. However, in order to derive a benefit from this outcome further management action may

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<sup>65</sup> The Evaluation Consultant(s) should verify that the annual Project Implementation Reviews have been submitted, that the Tracking Tool is being kept up-to-date and that in the CEO Endorsement template Table A and Section E have been completed.

still be needed e.g. to undertake actions to enforce the policy. Other direct outcomes may be dependent on a continuous flow of action that needs to be resourced for them to be maintained, e.g. continuation of a new resource management approach. The evaluation will assess the extent to which project outcomes are dependent on future funding for the benefits they bring to be sustained. Secured future funding is only relevant to financial sustainability where the direct outcomes of a project have been extended into a future project phase. The question still remains as to whether the future project outcomes will be financially sustainable.

*iii. Institutional Sustainability*

39. The evaluation will assess the extent to which the sustainability of project outcomes is dependent on issues relating to institutional frameworks and governance. It will consider whether institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. are robust enough to continue delivering the benefits associated with the project outcomes after project closure.

40. *Factors affecting this criterion may include:* stakeholders participation and cooperation; responsiveness to human rights and gender equity (e.g. where interventions are not inclusive, their sustainability may be undermined); communication and public awareness and country ownership and driven-ness.

**I. Factors and Processes Affecting Project Performance**

41. These factors are rated in the ratings table, but are discussed as cross-cutting themes as appropriate under the other evaluation criteria, above.

*i. Preparation and Readiness*

42. This criterion focuses on the inception or mobilisation stage of the project. The evaluation will assess whether appropriate measures were taken to either address weaknesses in the project design or respond to changes that took place between project approval, the securing of funds and project mobilisation. In particular the evaluation will consider the nature and quality of engagement with stakeholder groups by the project team, the confirmation of partner capacity and development of partnership agreements as well as initial staffing and financing arrangements. (Project preparation is covered in the template for the assessment of Project Design Quality).

*ii. Quality of Project Implementation and Execution*

43. Specifically for GEF funded projects, this factor refers separately to the performance of the executing agency and the technical backstopping and supervision provided by UN Environment, as the implementing agency.

44. The evaluation will assess the effectiveness of project management with regard to: providing leadership towards achieving the planned outcomes; managing team structures; maintaining productive partner relationships (including Steering Groups etc.); communication and collaboration with UN Environment colleagues; risk management; use of problem-solving; project adaptation and overall project execution. Evidence of adaptive project management should be highlighted.

*iii. Stakeholder Participation and Cooperation*

45. Here the term 'stakeholder' should be considered in a broad sense, encompassing all project partners, duty bearers with a role in delivering project outputs and target users of project outputs and any other collaborating agents external to UN Environment. The assessment will consider the quality and effectiveness of all forms of communication and consultation with stakeholders throughout the project life and the support given to maximise collaboration and coherence between various stakeholders, including sharing plans, pooling resources and exchanging learning and expertise. The inclusion and participation of all differentiated groups, including gender groups, should be considered.

*iv. Responsiveness to Human Rights and Gender Equity*

46. The evaluation will ascertain to what extent the project has applied the UN Common Understanding on the human rights based approach (HRBA) and the UN Declaration on the Rights of Indigenous People. Within this human rights context the evaluation will assess to what extent the intervention adheres to UN Environment's Policy and Strategy for Gender Equality and the Environment.

47. The report should present the extent to which the intervention, following an adequate gender analysis at design stage, has implemented the identified actions and/or applied adaptive management to ensure that Gender Equity and Human Rights are adequately taken into account. In particular, the evaluation will consider to what extent project design (section B), the implementation that underpins effectiveness (section D), and monitoring (section G) have taken into consideration: (i) possible gender inequalities in access to and the control over natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

*v. Country Ownership and Driven-ness*

48. The evaluation will assess the quality and degree of engagement of government / public sector agencies in the project. The evaluation will consider the involvement not only of those directly involved in project execution and those participating in technical or leadership groups, but also those official representatives whose cooperation is needed for change to be embedded in their respective institutions and offices. This factor is concerned with the level of ownership generated by the project over outputs and outcomes and that is necessary for long term impact to be realised. This ownership should adequately represent the needs and interests of all gender and marginalised groups.

*vi. Communication and Public Awareness*

49. The evaluation will assess the effectiveness of: a) communication of learning and experience sharing between project partners and interested groups arising from the project during its life and b) public awareness activities that were undertaken during the implementation of the project to influence attitudes or shape behaviour among wider communities and civil society at large. The evaluation should consider whether existing communication channels and networks were used effectively, including meeting the differentiated needs of gender and marginalised groups, and whether any feedback channels were established. Where knowledge sharing platforms have been established under a project the evaluation will comment on the sustainability of the communication channel under either socio-political, institutional or financial sustainability, as appropriate.

## **EVALUATION APPROACH, METHODS AND DELIVERABLES**

50. The Terminal Evaluation will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used as appropriate to determine project achievements against the expected outputs, outcomes and impacts. It is highly recommended that the consultant(s) maintains close communication with the project team and promotes information exchange throughout the evaluation implementation phase in order to increase their (and other stakeholder) ownership of the evaluation findings. Where applicable, the consultant(s) should provide a geo-referenced map that demarcates the area covered by the project and, where possible, provide geo-reference photographs of key intervention sites (e.g. sites of habitat rehabilitation and protection, pollution treatment infrastructure, etc.)

51. The findings of the evaluation will be based on the following:

(a) A **desk evaluation** of:

- Relevant background documentation, inter alia National Implementations Plans for POPs in the participating countries and related status reports, progress and evaluation reports of similar initiatives, country planning documents/strategies etc.
- Project design documents (including minutes of the project design evaluation meeting at approval); Annual Work Plans and Budgets or equivalent, revisions to the project (Project Document Supplement and similar), the logical framework and budgets;
- Project reports such as six-monthly progress and financial reports (expenditure), progress reports from collaborating partners to UN Environment, meeting minutes (steering committee etc), relevant correspondence and including the Project Implementation Reviews and Tracking Tool, workshop participant lists, agendas and presentations;
- Project outputs: substantive reports / studies/ inventory documents produced by the project;
- Mid-Term Review of the project (contracted 2013);

(b) **Interviews** (individual or in group) with:

- UN Environment Task Manager (TM);
- Project management team;
- UN Environment Fund Management Officer (FMO);
- Sub-Programme Coordinator (Chemicals and Waste);
- Project partners, including (but not limited to) Basel Convention Regional Centre for French speaking countries in Africa based in Dakar (BCRC) and WAPP and UN Environment Regional office to Africa;
- Relevant resource persons.

(c) **Surveys** (as decided in the inception phase)

(d) **Field visits** to 4-6 participating countries and possibly Nairobi

(e) **Other data collection tools**

#### **4. Evaluation Deliverables and Review Procedures**

52. The evaluation consultant will prepare:

- **Preparatory note:** a note of 2-4 pages covering the key observations made during the AFLDC steering committee meeting(s).
- **Inception Report:** (see Annex 1 for links to all templates, tables and guidance notes) containing an assessment of project design quality, a draft reconstructed Theory of Change of the project, project stakeholder analysis, evaluation framework and a tentative evaluation schedule.
- **Preliminary Findings Note:** typically in the form of a powerpoint presentation, the sharing of preliminary findings is intended to support the participation of the project team, act as a means

to ensure all information sources have been accessed and provide an opportunity to verify emerging findings. In the case of highly strategic project/portfolio evaluations or evaluations with an Evaluation Reference Group, the preliminary findings may be presented as a word document for evaluation and comment.

- **Draft and Final Evaluation Report:** (see links in Annex 1) containing an executive summary that can act as a stand alone document; detailed analysis of the evaluation findings organised by evaluation criteria and supported with evidence; lessons learned and recommendations and an annotated ratings table.
- **Evaluation Bulletin:** a 2-page summary of key evaluation findings for wider dissemination through the EOU website (including a summary in French to be circulated for country stakeholders).

53. **Review of the draft evaluation report.** The evaluation team will submit a draft report to the Evaluation Manager and revise the draft in response to their comments and suggestions. Once a draft of adequate quality has been peer-reviewed and accepted, the Evaluation Manager will share the cleared draft report with the Project Manager, who will alert the Evaluation Manager in case the report contains any blatant factual errors. The Evaluation Manager will then forward revised draft report (corrected by the evaluation team where necessary) to other project stakeholders, for their review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions as well as providing feedback on the proposed recommendations and lessons. Any comments or responses to draft reports will be sent to the Evaluation Manager for consolidation. The Evaluation Manager will provide all comments to the evaluation team for consideration in preparing the final report, along with guidance on areas of contradiction or issues requiring an institutional response.

54. Based on a careful review of the evidence collated by the evaluation consultants and the internal consistency of the report, the Evaluation Manager will provide an assessment of the ratings in the final evaluation report. Where there are differences of opinion between the evaluator and the Evaluation Manager on project ratings, both viewpoints will be clearly presented in the final report. The Evaluation Office ratings will be considered the final ratings for the project.

55. The Evaluation Manager will prepare a **quality assessment** of the first and final drafts of the main evaluation report, which acts as a tool for providing structured feedback to the evaluation consultants. The quality of the report will be assessed and rated against the criteria specified in template listed in Annex 1 and this assessment will be appended to the Final Evaluation Report.

56. At the end of the evaluation process, the Evaluation Office will prepare a **Recommendations Implementation Plan** in the format of a table, to be completed and updated at regular intervals by the Task Manager. The Evaluation Office will track compliance against this plan on a six monthly basis.

## 5. The Consultants' Team

57. For this evaluation, the evaluation team will consist of one Evaluation Consultant who will work under the overall responsibility of the Evaluation Office represented by an Evaluation Manager Saila Toikka, in consultation with the UN Environment Task Manager Kevin Helps Fund Management Officer Anuradha Shenoy and the Sub-programme Coordinators of the Chemicals and Waste (when relevant). The consultant will liaise with the Evaluation Manager on any procedural and methodological matters related to the evaluation. It is, however, the consultants' individual responsibility to arrange for their visas and immunizations as well as to plan meetings with stakeholders, organize online surveys, obtain documentary evidence and any other logistical matters related to the assignment. The UN Environment

Task Manager and project team will, where possible, provide logistical support (introductions, meetings etc.) allowing the consultants to conduct the evaluation as efficiently and independently as possible.

58. The consultant will be hired over the period July 15, 2017 to January 15, 2017 and should have: an advanced university degree in natural or environmental sciences, international development or other relevant political or social sciences area; a minimum of 20 years of technical / evaluation experience, including of evaluating large, regional or global programmes and using a Theory of Change approach; a broad understanding of environmentally sound management approaches of chemicals and specially those identified in Stockholm convention on POPs, along with excellent writing skills in English and work proficiency in French; and, where possible, knowledge of the UN system, specifically of the work of UN Environment.

59. The Consultant will be responsible, in close consultation with the Evaluation Office of UN Environment, for overall management of the evaluation and timely delivery of its outputs, described above in Section 11 Evaluation Deliverables, above. The Consultants will ensure together that all evaluation criteria and questions are adequately covered.

60. Details of Evaluation Consultants' Team Roles can be found on the Evaluation Office of UN Environment website: [www.unep.org/evaluation](http://www.unep.org/evaluation).

## 6. Schedule of the evaluation

61. The table below presents the tentative schedule for the evaluation.

**Table 3. Tentative schedule for the evaluation**

Milestone	Timeline
<i>[Workshop participation in Nairobi)</i>	<i>June 26 -30</i>
Inception interviews and initial desk review	August 30
Inception report (1 <sup>st</sup> submission)	July 23
Inception Report (final submission)	August 15
Evaluation Missions (to be specified in the inception phase)	November 15
Telephone interviews, surveys etc.	November 30
Powerpoint/presentation on preliminary findings and recommendations	December 5
Draft report to Evaluation Manager (and Peer Reviewer)	December 10
Draft Report shared with UN Environment Project Manager and team	December 20



Milestone	Timeline
Draft Report shared with stakeholder (with executive summary and language versions)	January 5
Final Report	January 15

## Contractual Arrangements

62. Evaluation Consultants will be selected and recruited by the Evaluation Office of UN Environment under an individual Special Service Agreement (SSA) on a “fees only” basis (see below). By signing the service contract with UN Environment/UNON, the consultant(s) certify that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of the contract) with the project’s executing or implementing units. All consultants are required to sign the Code of Conduct Agreement Form.

63. Fees will be paid on an instalment basis, paid on acceptance by the Evaluation Office of expected key deliverables. The schedule of payment is as follows:

### 1. Schedule of Payment for the consultant:

Deliverable	Percentage Payment
Preparatory note (as per para 68)	15%
Approved Inception Report ( <i>as per annex 1</i> )	25%
Approved Draft Main Evaluation Report ( <i>as per annex 1</i> )	25%
Approved Final Main Evaluation Report	35%

64. Fees only contracts: Air tickets will be purchased by UN Environment and 75% of the Daily Subsistence Allowance for each authorised travel mission will be paid up front. Local in-country travel will only be reimbursed where agreed in advance with the Evaluation Office and on the production of acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion.

65. The consultants may be provided with access to UN Environment’s Programme Information Management System (PIMS) and if such access is granted, the consultants agree not to disclose information from that system to third parties beyond information required for, and included in, the evaluation report.

66. In case the consultants are not able to provide the deliverables in accordance with these guidelines, and in line with the expected quality standards by the UN Environment Evaluation Office, payment may be withheld at the discretion of the Director of the Evaluation Office until the consultants have improved the deliverables to meet UN Environment’s quality standards.

67. If the consultant(s) fail to submit a satisfactory final product to UN Environment in a timely manner, i.e. before the end date of their contract, the Evaluation Office reserves the right to employ additional human resources to finalize the report, and to reduce the consultants’ fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard.

## Annex: Tools, Templates and Guidance Notes for use in the Evaluation

The tools, templates and guidance notes listed in the table below, and available on the Evaluation Office website ([www.unep.org/evaluation](http://www.unep.org/evaluation)), are intended to help Evaluation Managers and Evaluation Consultants to produce evaluation products that are consistent with each other and which can be compiled into a biennial Evaluation Synthesis Report. The biennial summary is used to provide an overview of progress to UN Environment and the UN Environmental Assembly. This suite of documents is also intended to make the evaluation process as transparent as possible so that all those involved in the process can participate on an informed basis. It is recognised that the evaluation needs of projects and portfolio vary and adjustments may be necessary so that the purpose of the evaluation process (broadly, accountability and lesson learning), can be met. Such adjustments should be decided between the Evaluation Manager and the Evaluation Consultant in order to produce evaluation reports that are both useful to project implementers and that produce credible findings.

Document	Name
1	Evaluation Process Guidelines for Consultants
2	Evaluation Consultants Team Roles ( <i>applies generally to Team Members as well</i> )
3	Evaluation Ratings Table
4	Weighting of Ratings (excel)
5	Evaluation Criteria ( <i>summary of descriptions, as in these terms of reference</i> )
6	Matrix Describing Ratings by Criteria
7	Structure and Contents of the Inception Report
8	Template for the Assessment of the Quality of Project Design
9	Guidance on Stakeholder Analysis
10	Use of Theory of Change in Project Evaluations
11	Assessment of the Likelihood of Impact Decision Tree (Excel)
12	Possible Evaluation Questions
13	Structure and Contents of the Main Evaluation Report
14	Cover Page, Prelims and Style Sheet for Main Evaluation Report
15	Financial Tables
16	Template for the Assessment of the Quality of the Evaluation Report

## Annex 4. Quality assessment of the evaluation report

### Quality Assessment of the Evaluation Report

Evaluation Title:

<p><b>UN Environment-GEF Project</b></p> <p><b>“Demonstration of a Regional Approach to Environmentally Sound Management of PCB Liquid Wastes and Transformers and Capacitors Containing PCBs”</b></p>
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All UN Environment evaluations are subject to a quality assessment by the Evaluation Office. This is an assessment of the quality of the evaluation product (i.e. evaluation report) and is dependent on more than just the consultant’s efforts and skills. Nevertheless, the quality assessment is used as a tool for providing structured feedback to evaluation consultants, especially at draft report stage. This guidance is provided to support consistency in assessment across different Evaluation Managers and to make the assessment process as transparent as possible.

	UN Environment Evaluation Office Comments		Final Report Rating
<b>Substantive Report Quality Criteria</b>			
<p><b>Quality of the Executive Summary:</b></p> <p>The Summary should be able to stand alone as an accurate summary of the main evaluation product. It should include a concise overview of the evaluation object; clear summary of the evaluation objectives and scope; overall evaluation rating of the project and key features of performance (strengths and weaknesses) against exceptional criteria (plus reference to where the evaluation ratings table can be found within the report); summary of the main findings of the exercise, including a synthesis of main conclusions (which include a summary response to key strategic evaluation questions), lessons learned and recommendations.</p>	<p><b>Draft report:</b> (Exec Summaries are not always provided at draft stage)</p>	<p><b>Final report:</b> Slightly long</p>	5
<p><b>I. Introduction</b></p> <p>A brief introduction should be given identifying, where possible and relevant, the following: institutional context of the project (sub-programme, Division, regions/countries where implemented) and coverage of the evaluation; date of PRC approval and project document signature); results frameworks to which it contributes (e.g. Expected Accomplishment in POW); project duration and start/end dates; number of project phases (where appropriate); implementing partners; total secured budget and whether the project has been evaluated in the past (e.g. mid-term, part of a synthesis evaluation, evaluated by another agency etc.)</p>	<p><b>Draft report:</b> GEF approval date is sufficient in the intro. However, the UN Environment approval date needs to be established at least in the table 1 (information missing now)</p>	<p><b>Final report:</b></p>	6

	UN Environment Evaluation Office Comments		Final Report Rating
<p>Consider the extent to which the introduction includes a concise statement of the purpose of the evaluation and the key intended audience for the findings?</p>	<p>One sentence to be added concerning the overall approved project budget</p> <p>Specify Economy Division</p> <p>briefly mention phase 3. This is relevant in the sense that findings / lessons should be considered in that context</p>		
<p><b>II. Evaluation Methods</b></p> <p>This section should include a description of how the <i>TOC at Evaluation</i><sup>66</sup> was designed (who was involved etc.) and applied to the context of the project?</p> <p>A data collection section should include: a description of evaluation methods and information sources used, including the number and type of respondents; justification for methods used (e.g. qualitative/ quantitative; electronic/face-to-face); any selection criteria used to identify respondents, case studies or sites/countries visited; strategies used to increase stakeholder engagement and consultation; details of how data were verified (e.g. triangulation, review by stakeholders etc.).</p> <p>Methods to ensure that potentially excluded groups (excluded by gender, vulnerability or marginalisation) are reached and their experiences captured effectively, should be made explicit in this section.</p> <p>The methods used to analyse data (e.g. scoring; coding; thematic analysis etc.) should be described.</p> <p>It should also address evaluation limitations such as: low or imbalanced response rates across</p>	<p>Draft report:</p> <p>Evaluation limitations are not discussed (i.e. limitation in terms of representation of certain groups)</p> <p>Add a sentence about the evaluation ethics</p>	<p>Final report:</p> <p>Independency aspect of evaluation ethics covered</p>	<p>5</p>

<sup>66</sup> During the Inception Phase of the evaluation process a *TOC at Design* is created based on the information contained in the approved project documents (these may include either logical framework or a TOC or narrative descriptions). During the evaluation process this TOC is revised based on changes made during project intervention and becomes the *TOC at Evaluation*.

	UN Environment Evaluation Office Comments		Final Report Rating
<p>different groups; gaps in documentation; extent to which findings can be either generalised to wider evaluation questions or constraints on aggregation/disaggregation; any potential or apparent biases; language barriers and ways they were overcome.</p> <p>Ethics and human rights issues should be highlighted including: how anonymity and confidentiality were protected and strategies used to include the views of marginalised or potentially disadvantaged groups and/or divergent views.</p>			
<p><b>III. The Project</b></p> <p>This section should include:</p> <ul style="list-style-type: none"> <li>• <i>Context:</i> Overview of the main issue that the project is trying to address, its root causes and consequences on the environment and human well-being (i.e. synopsis of the problem and situational analyses).</li> <li>• <i>Objectives and components:</i> Summary of the project's results hierarchy as stated in the ProDoc (or as officially revised)</li> <li>• <i>Stakeholders:</i> Description of groups of targeted stakeholders organised according to relevant common characteristics</li> <li>• <i>Project implementation structure and partners:</i> A description of the implementation structure with diagram and a list of key project partners</li> <li>• <i>Changes in design during implementation:</i> Any key events that affected the project's scope or parameters should be described in brief in chronological order</li> <li>• <i>Project financing:</i> Completed tables of: (a) budget at design and expenditure by components (b) planned and actual sources of funding/co-financing</li> </ul>	<p><b>Draft report:</b></p>	<p><b>Final report:</b></p>	<p>6</p>
<p><b>IV. Theory of Change</b></p> <p>The TOC at Evaluation should be presented clearly in both diagrammatic and narrative forms. Clear articulation of each major causal pathway is expected, (starting from outputs to long term impact), including explanations of all drivers and assumptions as well as the expected roles of key actors.</p> <p>Where the project results as stated in the project design documents (or formal revisions of the project design) are not an accurate reflection of the project's intentions or do not follow OECD/DAC definitions of different results levels, project results may need to be</p>	<p><b>Draft report:</b></p> <p>Some inaccuracies between the text and table statements.</p>	<p><b>Final report:</b></p>	<p>6</p>

	UN Environment Evaluation Office Comments		Final Report Rating
re-phrased or reformulated. In such cases, a summary of the project's results hierarchy should be presented for: a) the results as stated in the approved/ revised Prodoc logframe/TOC and b) as formulated in the TOC at Evaluation. <i>The two results hierarchies should be presented as a two column table to show clearly that, although wording and placement may have changed, the results 'goal posts' have not been 'moved'.</i>			
<p><b>V. Key Findings</b></p> <p><b>A. Strategic relevance:</b></p> <p>This section should include an assessment of the project's relevance in relation to UN Environment's mandate and its alignment with UN Environment's policies and strategies at the time of project approval. An assessment of the complementarity of the project with other interventions addressing the needs of the same target groups should be included. Consider the extent to which all four elements have been addressed:</p> <ul style="list-style-type: none"> <li>v. Alignment to the UN Environment Medium Term Strategy (MTS) and Programme of Work (POW)</li> <li>vi. Alignment to UN Environment/ Donor/GEF Strategic Priorities</li> <li>vii. Relevance to Regional, Sub-regional and National Environmental Priorities</li> <li>viii. Complementarity with Existing Interventions</li> </ul>	Draft report:	Final report:	6
<p><b>B. Quality of Project Design</b></p> <p>To what extent are the strength and weaknesses of the project design effectively <u>summarized</u>?</p>	Draft report:	Final report:	6
<p><b>C. Nature of the External Context</b></p> <p>For projects where this is appropriate, key <u>external</u> features of the project's implementing context that limited the project's performance (e.g. conflict, natural disaster, political upheaval), and how they affected performance, should be described.</p>	Draft report:	Final report:	5
<p><b>D. Effectiveness</b></p> <p><b>(i) Outputs and Direct Outcomes:</b> How well does the report present a well-reasoned, complete and evidence-based assessment of the a) delivery of outputs, and b) achievement of direct outcomes? How convincing is the discussion of attribution and contribution, as well as the constraints to attributing effects to the intervention.</p>	<p>Draft report:</p> <p>Better linkage between outputs and outcomes could benefit the analysis</p>	Final report:	6

	UN Environment Evaluation Office Comments		Final Report Rating
The effects of the intervention on differentiated groups, including those with specific needs due to gender, vulnerability or marginalisation, should be discussed explicitly.			
<p><b>(ii) Likelihood of Impact:</b> How well does the report present an integrated analysis, guided by the causal pathways represented by the TOC, of all evidence relating to likelihood of impact?</p> <p>How well are change processes explained and the roles of key actors, as well as drivers and assumptions, explicitly discussed?</p> <p>Any unintended negative effects of the project should be discussed under Effectiveness, especially negative effects on disadvantaged groups.</p>	<p><b>Draft report:</b></p> <p>Very brief. The intermediate states or drivers/assumption are not explicitly discussed.</p>	<p><b>Final report:</b></p> <p>Comments mostly addressed</p>	5
<p><b>E. Financial Management</b></p> <p>This section should contain an integrated analysis of all dimensions evaluated under financial management and include a completed 'financial management' table.</p> <p>Consider how well the report addresses the following:</p> <ul style="list-style-type: none"> <li>• <i>completeness</i> of financial information, including the actual project costs (total and per activity) and actual co-financing used</li> <li>• <i>communication</i> between financial and project management staff</li> </ul>	<p><b>Draft report:</b></p> <p>Table to be added in annex/report</p>	<p><b>Final report:</b></p> <p>Assessment table not provided in the annex</p>	5
<p><b>F. Efficiency</b></p> <p>To what extent, and how well, does the report present a well-reasoned, complete and evidence-based assessment of efficiency under the primary categories of cost-effectiveness and timeliness including:</p> <ul style="list-style-type: none"> <li>• Implications of delays and no cost extensions</li> <li>• Time-saving measures put in place to maximise results within the secured budget and agreed project timeframe</li> <li>• Discussion of making use of/building on pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc.</li> <li>• The extent to which the management of the project minimised UN Environment's environmental footprint.</li> </ul>	<p><b>Draft report:</b></p> <p>Rating should consider with the external factors</p>	<p><b>Final report:</b></p>	6

	UN Environment Evaluation Office Comments		Final Report Rating
<p><b>G. Monitoring and Reporting</b> How well does the report assess:</p> <ul style="list-style-type: none"> <li>Monitoring design and budgeting (<i>including SMART indicators, resources for MTE/R etc.</i>)</li> <li>Monitoring of project implementation (<i>including use of monitoring data for adaptive management</i>)</li> <li>Project reporting (e.g. PIMS and donor report)</li> </ul>	<p><b>Draft report:</b></p> <p>Some comments to be addressed</p>	<p><b>Final report:</b></p>	6
<p><b>H. Sustainability</b> How well does the evaluation identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of achieved direct outcomes including:</p> <ul style="list-style-type: none"> <li>Socio-political Sustainability</li> <li>Financial Sustainability</li> <li>Institutional Sustainability</li> </ul>	<p><b>Draft report:</b></p>	<p><b>Final report:</b></p>	6
<p><b>I. Factors Affecting Performance</b> These factors are <u>not</u> discussed in stand-alone sections but are <b>integrated in criteria A-H as appropriate</b>. Note that these are described in the Evaluation Criteria Ratings Matrix. To what extent, and how well, does the evaluation report cover the following cross-cutting themes:</p> <ul style="list-style-type: none"> <li>Preparation and readiness</li> <li>Quality of project management and supervision<sup>67</sup></li> <li>Stakeholder participation and co-operation</li> <li>Responsiveness to human rights and gender equity</li> <li>Country ownership and driven-ness</li> <li>Communication and public awareness</li> </ul>	<p><b>Draft report:</b></p> <p>The ratings table summary should contain a linkage to the main body of the report (with paragraph references)</p>	<p><b>Final report:</b></p> <p>No paragraph references provided</p>	5
<p><b>VI. Conclusions and Recommendations</b></p> <p>i. <b>Quality of the conclusions:</b> The key strategic questions should be clearly and succinctly addressed within the conclusions section. It is expected that the conclusions will highlight the main strengths and weaknesses of the project, and connect them in a compelling story line. Human rights and gender dimensions of the intervention (e.g. how these dimensions were considered, addressed or impacted on) should be discussed explicitly. Conclusions, as well as lessons and recommendations, should be consistent with the</p>	<p><b>Draft report:</b></p> <p>Table connects the key conclusions with recommendations well.</p> <p>A brief narrative text to conclude key issues should be added</p>	<p><b>Final report:</b></p>	5

<sup>67</sup> In some cases 'project management and supervision' will refer to the supervision and guidance provided by UN Environment to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UN Environment.



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	UN Environment Evaluation Office Comments		Final Report Rating
evidence presented in the main body of the report.			
<b>ii) Quality and utility of the lessons:</b> Both positive and negative lessons are expected and duplication with recommendations should be avoided. Based on explicit evaluation findings, lessons should be rooted in real project experiences or derived from problems encountered and mistakes made that should be avoided in the future. Lessons must have the potential for wider application and use and should briefly describe the context from which they are derived and those contexts in which they may be useful.	<b>Draft report:</b>	<b>Final report:</b>	5
<b>iii) Quality and utility of the recommendations:</b> To what extent are the recommendations proposals for specific action to be taken by identified people/position-holders to resolve concrete problems affecting the project or the sustainability of its results? They should be feasible to implement within the timeframe and resources available (including local capacities) and specific in terms of who would do what and when.  At least one recommendation relating to strengthening the human rights and gender dimensions of UN Environment interventions, should be given.  Recommendations should represent a measurable performance target in order that the Evaluation Office can monitor and assess compliance with the recommendations.	<b>Draft report:</b>  <b>Application of the recommendations in phase 3 could be further highlighted</b>	<b>Final report:</b>	5
<b>VII. Report Structure and Presentation Quality</b>			
<b>i) Structure and completeness of the report:</b> To what extent does the report follow the Evaluation Office guidelines? Are all requested Annexes included and complete?	<b>Draft report:</b>  <b>Only main report body reviewed</b>	<b>Final report:</b>	6
<b>ii) Quality of writing and formatting:</b> Consider whether the report is well written (clear English language and grammar) with language that is adequate in quality and tone for an official document? Do visual aids, such as maps and graphs convey key information? Does the report follow Evaluation Office formatting guidelines?	<b>Draft report:</b>	<b>Final report:</b>	6
<b>OVERALL REPORT QUALITY RATING</b>			5.5

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A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1. The overall quality of the evaluation report is calculated by taking the mean score of all rated quality criteria.

Evaluation Process Quality Criteria	Compliance	
	Yes	No
<b>Independence:</b>		
1. Were the Terms of Reference drafted and finalised by the Evaluation Office?	X	
2. Were possible conflicts of interest of proposed Evaluation Consultant(s) appraised and addressed in the final selection?	X	
3. Was the final selection of the Evaluation Consultant(s) made by the Evaluation Office?	X	
4. Was the evaluator contracted directly by the Evaluation Office?	X	
5. Was the Evaluation Consultant given direct access to identified external stakeholders in order to adequately present and discuss the findings, as appropriate?	X	
6. Did the Evaluation Consultant raise any concerns about being unable to work freely and without interference or undue pressure from project staff or the Evaluation Office?		X
7. If Yes to Q6: Were these concerns resolved to the mutual satisfaction of both the Evaluation Consultant and the Evaluation Manager?		
<b>Financial Management:</b>		
8. Was the evaluation budget approved at project design available for the evaluation?	X	
9. Was the final evaluation budget agreed and approved by the Evaluation Office?	X	
10. Were the agreed evaluation funds readily available to support the payment of the evaluation contract throughout the payment process?	X	
<b>Timeliness:</b>		
11. If a Terminal Evaluation: Was the evaluation initiated within the period of six months before or after project operational completion? Or, if a Mid Term Evaluation: Was the evaluation initiated within a six-month period prior to the project's mid-point?		X
12. Were all deadlines set in the Terms of Reference respected, as far as unforeseen circumstances allowed?		X
13. Was the inception report delivered and reviewed/approved prior to commencing any travel?	X	
<b>Project's engagement and support:</b>		
14. Did the project team, Sub-Programme Coordinator and identified project stakeholders provide comments on the evaluation Terms of Reference?	X	
15. Did the project make available all required/requested documents?	X	
16. Did the project make all financial information (and audit reports if applicable) available in a timely manner and to an acceptable level of completeness?	X	
17. Was adequate support provided by the project to the evaluator(s) in planning and conducting evaluation missions?	X	
18. Was close communication between the Evaluation Consultant, Evaluation Office and project team maintained throughout the evaluation?	X	
19. Were evaluation findings, lessons and recommendations adequately discussed with the project team for ownership to be established?		X
20. Did the project team, Sub-Programme Coordinator and any identified project stakeholders provide comments on the draft evaluation report?	X	
<b>Quality assurance:</b>		
21. Were the evaluation Terms of Reference, including the key evaluation questions, peer-reviewed?	X	
22. Was the TOC in the inception report peer-reviewed?	X	

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23. Was the quality of the draft/cleared report checked by the Evaluation Manager and Peer Reviewer prior to dissemination to stakeholders for comments?	X	
24. Did the Evaluation Office complete an assessment of the quality of both the draft and final reports?	X	
<b>Transparency:</b>		
25. Was the draft evaluation report sent directly by the Evaluation Consultant to the Evaluation Office?	X	
26. Did the Evaluation Manager disseminate (or authorize dissemination) of the cleared draft report to the project team, Sub-Programme Coordinator and other key internal personnel (including the Reference Group where appropriate) to solicit formal comments?	X	
27. Did the Evaluation Manager disseminate (or authorize dissemination) appropriate drafts of the report to identified external stakeholders, including key partners and funders, to solicit formal comments?	X <sup>68</sup>	
28. Were stakeholder comments to the draft evaluation report sent directly to the Evaluation Office	X	
29. Did the Evaluation Consultant(s) respond to all factual corrections and comments?	X	
30. Did the Evaluation Office share substantive comments and Evaluation Consultant responses with those who commented, as appropriate?	X	

**Provide comments / explanations / mitigating circumstances below for any non-compliant process issues.**

<b><u>Process Criterion Number</u></b>	<b><u>Evaluation Office Comments</u></b>
<b><u>11</u></b>	The project was extended after initiation of the terminal evaluation process.
<b><u>12</u></b>	Delays were experienced in the draft report submissions as well as in receiving stakeholder feedback
<b><u>19</u></b>	Findings meeting was not organized due to busy schedule of some key stakeholders. However, those stakeholders that are expected to take the recommendations forward have been kept informed about the findings and recommendations.

<sup>68</sup> Will be distributed to GEF (funding agency)