Independent Terminal Evaluation

Safe PCB Management Programme in Morocco, Pillar II Environmentally Sound Management and Disposal of PCB-Contaminated Transformers in Morocco

UNIDO Project No.: 104051
GEF Project ID: 3883

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO INDEPENDENT EVALUATION DIVISION

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Acronyms and Abbreviations

AWPs	Annual Work Plans
CGEM	Confédération Générale des Entreprises du Maroc
GEF	Global Environment Facility
GOV	Government of Morocco
GIZ	German Technical Cooperation
HQ	Headquarter
INV	Investments
MDGs	Millennium Development Goals
M&E	Monitoring and Evaluation
MME	Maroc Maintenance Environnement
MTE	Mid-Term Evaluation
NSDS	National Sustainable Development Strategy
NIP	National Implementation Plan
OCP	Office Chérifien des Phosphates
ONDA	Office National Des Aéroports
ONEE	Office Nationale de l'Electricité de de l'Eau Potable
PCB	Polychlorinated biphenyls
PCB-NC	National Commission on PCBs
PCU	Project Coordination unit
PIR	Project Implementation Report
PM	Project Manager
PMT	Project management Team
POPs	Persistent Organic Pollutants
PRODOC	Project Document
PSC	Project Steering Committee
SMART	Specific, Measurable, Attainable, Relevant, Trackable
SMEs	Small and Medium Enterprises
SNRT	Société Nationale de Radio & Télévision
TA	Technical Assistance
TE	Terminal Evaluation
TOC	Theory of Change
TORs	Terms of Reference
UNDP	United Nations Development Program
UNIDO	United Nations Industrial Development Organization

Glossary of evaluation-related terms

Term	Definition
Baseline	The situation, prior to an intervention, against which progress can be assessed.
Effect	Intended or unintended change due directly or indirectly to an intervention.
Effectiveness	The extent to which the development intervention's objectives were achieved, or are expected to be achieved.
Efficiency	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.
Impact	Positive and negative, intended and non-intended, directly and indirectly, long term effects produced by a development intervention.
Indicator	Quantitative or qualitative factors that provide a means to measure the changes caused by an intervention.
Lessons learned	Generalizations based on evaluation experiences that abstract from the specific circumstances to broader situations.
Logframe (logical framework approach)	Management tool used to facilitate the planning, implementation and evaluation of an intervention. It involves identifying strategic elements (activities, outputs, outcome, impact) and their causal relationships, indicators, and assumptions that may affect success or failure. Based on RBM (results based management) principles.
Outcome	The likely or achieved (short-term and/or medium-term) effects of an intervention's outputs.
Outputs	The products, capital goods and services which result from an intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.
Relevance	The extent to which the objectives of an intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donor's policies.
Risks	Factors, normally outside the scope of an intervention, which may affect the achievement of an intervention's objectives.
Sustainability	The continuation of benefits from an intervention, after the development assistance has been completed.
Target groups	The specific individuals or organizations for whose benefit an intervention is undertaken.

Executive summary

The programme for the Safe PCB Management in Morocco, Pillar II (hereafter referred to as “the PCB project Pillar II”) is a direct continuation of the National Implementation Plan (NIP) prepared by the Ministry of Environment, following the ratification by Morocco of the Stockholm Convention, in 2004.

The NIP has identified the following priorities: "Development of national capacities for POPs management"; "Updating of national legislation to take into account of the obligations of the Convention" and "Development of a strategy for the elimination of equipment containing PCBs from the national environment and destruction of PCB-contaminated oils in an environmentally sound manner ".

Morocco has conducted two inventories of PCB contaminated transformers. The first, in 2002 by the Ministry of the Environment and the second, in 2004-2005, within the framework of the Enabling Activity for the POPs project.

During the project’s preparatory phase (from December 2007 to February 2008), several statistical analyses were carried out to estimate the total park of transformers available in Morocco (about 100,000). The analytical testing of transformers concluded that there would be a significant market opportunity for technology vendors in the country (about 20 to 25% of the transformers tested had a level of contamination above 50 ppm). The feasibility studies also undertaken during the preparatory phase were aimed at selecting the most environmentally and economically sound option for Morocco, among the different technologies available for the treatment of PCBs.

The overall objective of the PCB project Pillar II was to assist Morocco to effectively and efficiently implement the Stockholm Convention on POPs in specifically treating and reclaiming nearly 3,000 tons of PCB-contaminated mineral oil from in-service equipment and decontaminating 2,000 tons of PCB wastes by establishing the in-the-country capacity to deal with PCB contaminated electrical equipment and other related material. This specific objective had to be achieved through the achievement of the four expected outcomes of the project.

Outcome 1 focused on the identification of analytical laboratories with the capacity to analyze PCBs on the one hand and the establishment of a standard PCB sampling and analysis protocol on the other.

The maintenance and environmentally sound management of PCB-contaminated mineral oil transformers and the dismantling of those that are decommissioned (for disposal abroad) must be carried out in a treatment unit that meets international standards and in using a low-emission technology. This was covered by outcomes 2 and 3 of the project.

In order to generalize the approach, Outcome 4 focused on the development and implementation of a project monitoring management structure in accordance with the GEF M & E procedures and the establishment of a knowledge management, information sharing and capabilities dissemination mechanism.

A terminal evaluation is mandatory for all GEF-funded full-size projects. Its purpose is to "provide a complete and systematic report of the performance of a completed project by assessing its design, implementation process, achievements with respect to project objectives, including any agreed

changes in the objectives and any other outcome during the project implementation". This terminal evaluation covers the entire duration of the PCB project Pillar II from its start date, in July 2010 to 31 December 2016.

The following table summarizes the ratings for each issue addressed by the terminal evaluation in accordance with UNIDO and GEF standards. The reasoning, arguments and justification of each notation is detailed in the body of the report.

Rating table of the terminal evaluation:

RATINGS

6 | Highly Satisfactory (HS): no shortcomings

5 | Satisfactory (S): minor shortcomings

4 | Moderately satisfactory (MS): moderate shortcomings

3| Moderately Unsatisfactory (MU): significant shortcomings

2 I Unsatisfactory (U): major shortcomings

1 | Highly Unsatisfactory (HU): severe shortcomings

Criteria:	**Rating :**
Attainment of project objectives and results (overall rating)	
Project implementation	MS
• Effectiveness	MS
• Relevance	HS
• Efficiency	MS
Sustainability of project outcomes	ML
• Institutional framework and governance risks	L
• Financial	ML
• Sociopolitical	L
• Environmental	ML
M&E	HS
• M&E design	S
• M&E Plan implementation (use of adaptive management)	HS
• Budgeting and Funding for M&E activities	S
Project formulation	S
• LFA	S
Project design	S
• LFM	S
Project management and Coordination	S
• Approche de mise en œuvre	S
• Supervision et appui de l'ONUDI	S
OVERALL RATING:	S

Conclusions

- The in-country capacity of Morocco has been increased in terms of knowledge and awareness related to the PCB issue and in terms of the availability of local technical expertise and infrastructures, however the PCB project Pillar II has not achieved its expected targets in terms of the pre-defined volume of PCB contaminated mineral oil and PCB contaminated metals to be treated.

- The country benefits from a state-of-the-art treatment plant which operates along international standards.

- The Moroccan government and the majority of large PCB holders are strongly committed to addressing the issue of PCB-contaminated in-service and decommissioned transformers.

- Some shortcomings in the design of the project, such as the lack of a detailed characterization of the inventory of the transformers (by age, by state), the too low estimation of the unit cost of the treatment, the focus on public and semi-public holders as well as on some large private companies, have had an impact on the achievements of the project's objective targets.

- The absence of a coercive law to ensure the environmentally sound management of in-service equipment contaminated with PCBs, and the weak enforcement of the law on waste management and disposal of decommissioned PCB-contaminated transformers, have led to the absence of motivation of PCB holders to hand over their contaminated equipment to the treatment plant. This has had an impact on the plant's activity and consequently on its profitability.

- The PCB project Pillar II was successful in terms of awareness-raising regarding the risks posed and the dangers stemming from PCBs to be found among large PCB holders, electricity distribution companies and the Government. However, the small and medium PCB holders which were holding a figure of at least 40% or so of the park of transformers were not sufficiently targeted and neither was the informal sector (metal scrap dealers)

- The overall efficiency of the project was affected by the delays to which it had been exposed (the project ran 6,5 years instead of the 3 years originally planned). It was also affected by the insufficient cost-effectiveness of outcomes 2 and 3, for which the totality of their budgets was disbursed for results that were below expectations).

- The Project Steering Committee, which included inter-ministerial representatives but mainly large PCB holders, did not effectively provide the project team with the necessary strategic guidance.

- It is likely that the project's benefits will be sustained, but this sustainability is highly dependent on the uninterrupted operation of the treatment plant, on the tightening of the legal and regulatory framework and its enforcement, and on the involvement of the private sector, which had not been sufficiently targeted when the first phase of the project had been underway.

- With the PCB project Pillar II being a demonstration project, it made it possible to draw lessons for future phases and/or other similar initiatives.

Recommendations

The Government should consider:
• completing and enforcing the legal framework relating to in-service and decommissioned PCB-contaminated transformers and PCB waste (finalizing and adopting the new law on chemical products which will relate to in-service PCB-contaminated transformers)
• Providing the required resources and means to the Environment Inspectors to enable them to enforce the law
• Mobilizing short-term additional financing to ensure the functioning of the treatment plant
• Building on lessons learnt from the PCB project Pillar II so that the feasibility studies might be updated, financial incentives and/or technical support to small and medium PCB holders might be put in place and the issue of the involvement of the informal sector might be addressed
• Keeping up the information and awareness-raising campaign targeting main stakeholders but also including the private sector and the population
• Reinforcing and institutionalizing the monitoring system put in place during the implementation of the PCB project Pillar II
• Launching a financial audit in order to determine the cost structure of the treatment process
UNIDO should consider:
• Streamlining the bureaucratic processes in order to avoid delays (the signature of the convention with the country concerned, the preparation of TORs, the reviewing of the financial aspects of tender results, etc.)
• Introducing more delegation procedures in the area of the financial management of the project, and supporting this with appropriate monitoring tools.
• Building on the lessons learnt from this project to develop other similar initiatives
• Encouraging south-south cooperation between countries in the same geographical region and finding themselves in a similar situation (knowledge and technology transfers).
GEF should consider:
• Given the time which elapsed between the preparatory phase (2007-2008) and the effective start of the project (2010), that the updating of feasibility studies for such types of projects should take place before the launch of a tender (2014) so that the evolution of the context might be taken into account.
• Speedy processing for the second phase of this project in order to take on board the positive dynamics generated by the PCB project Pillar II and to eschew the risk of the treatment plant closing down due to a lack of activity.

Lessons learned

The lessons that were learned from the PCB project Pillar II, and which similar future projects might consider are:
▪ The fact that the PCB Pillar II project's implementing agency had been designated from within the Ministry in charge of the environment and. in particular, from within the Directorate responsible for the implementation of the Ministry's management and disposal policy of hazardous waste, has allowed a strong institutional anchoring of the project and facilitated its ownership.
▪ The involvement of all potential target groups in both the preparation and the implementation of the project, and carrying out an assessment of the needs of these target groups, are two aspects of the process which are critically important if a successful mainstreaming of the environmentally sound management of PCB equipment into their activities/policy is to be achieved. This involvement requires that the project team establishes a climate of communication and of training at all levels on the objectives of the project, its conceptual framework and approach1. Such elements would bring to the planning of the holders an appreciable degree of innovations, and would bring new knowledge to some of the institutions involved (Health, Customs, etc.), helping them to have full ownership of the project from its early stages.
▪ Mutual support and synergy with other development partners working on identical themes in the field of capacity building and hazardous waste management would help catalyze the actions of the project. Ideally, this could be done through active participation in the improvement process of the methodological tools; through supporting the dissemination and use of these tools to reach local actors as far and wide as possible; by avoiding the redundant and repetitiveness of similar actions with the same beneficiaries.
▪ The availability of evidence-based data provides the arguments necessary to press on with developing the legal and regulatory framework and the management of hazardous waste. As was done by the PCB project pillar II, an inventory of PCB devices was drawn and the necessary tools for decision-making were developed (mapping PCB equipment and waste sites and potentially contaminated sites).
▪ The evolution of the national context in which the project is taking place must be taken into account throughout the different phases of the project. This should lead to integrating pointers into the logical framework of the project, with positive effects and a significant impact on the project results.
▪ The commissioning of the treatment plant made it possible to put to the test and industrial management model for the treatment of PCB-contaminated equipment and for the disposal of pure PCB transformers. This model could be replicated in countries with a similar economic set up. Technical and managerial knowledge could be shared between countries with a similar linguistic background. It could also be shared between all African countries in the context of South-South cooperation initiatives. Such patterns of knowledge sharing could also be extended to the countries of Eastern Europe and South America.

[1] The guide on best practice for a secure management of the PCBs (Arabic and French versions); the interactive training CD for all relevant stakeholders, including all information on life cycle management of PCBs; a study on the price of transformers and financial mechanisms to encourage owners to replace their PCB equipment; training modules on POP/ PCB to be integrated into the curricula of specialized Master degrees.

▪ The exploitation of the treatment plant made it possible for Morocco to set up a pricing code per ton of contaminated oil and / or per ton of contaminated equipment. This price code could serve as a reference for the development of similar projects in the region, in countries with a similar economic set up or across the African continent.
▪ The PCB project Pillar II could be taken as an ideal case-study to demonstrate how a holistic approach to PCB management could be taken. It combines both the will to keep the preliminary PCB inventories updated, and the will to keep PCB releases at the lowest possible levels while pressing on with disposal.

Résumé Exécutif

Le programme de gestion sécurisée des PCB au Maroc, Pilier II (désigné dans ce qui suit comme projet PCB pilier II) est une continuation directe du Plan National de Mise en œuvre (PNM) élaboré par le Ministère Délégué Chargé de l'Environnement (MDE) après la ratification de la convention de Stockholm en 2004 par le Maroc.

Le PNM a identifié les priorités suivantes : "Développement de capacités nationales en matière de gestion des POP" ; "Actualisation de la législation nationale pour tenir compte des obligations de la Convention" et "Développement d'une stratégie d'élimination de l'équipement contenant des PCB de l'environnement national et de destruction des huiles contaminées aux PCB, de manière écologiquement rationnelle".

Le Maroc a mené deux inventaires d'équipements contaminés aux PCB. Le premier en 2002 par le Ministère chargé de l'Environnement et le deuxième en 2004-2005 dans le cadre du projet d'Activité habilitante pour les POP.

Au cours de la phase préparatoire du projet (de décembre 2007 à février 2008), plusieurs analyses statistiques ont été réalisées pour estimer le parc total des transformateurs disponibles au Maroc (environ 100 000). Les tests analytiques des transformateurs ont conclu qu'il y aurait une opportunité de marché significative pour les fournisseurs de technologie dans le pays (20 à 25% des transformateurs sont contaminés avec un niveau de contamination supérieur à 50 ppm). Les études de faisabilité menées également au cours de la phase préparatoire visaient à sélectionner l'option la plus écologiquement et économiquement viable pour le Maroc, parmi les différentes technologies disponibles pour le traitement des PCB.

L'objectif général du projet PCB pilier II, était d'appuyer le Maroc à mettre en œuvre efficacement la Convention de Stockholm sur les POP en traitant et en récupérant près de 3 000 tonnes d'huile minérale contaminée par des PCB provenant des équipements en cours d'emploi et la décontamination 2 000 tonnes de déchets de PCB. Cet objectif spécifique devait être atteint grâce à la réalisation des quatre résultats escomptés du projet.

Le résultat 1 portait sur l'identification des laboratoires d'analyse ayant la capacité d'analyser les PCB d'une part et l'établissement d'un protocole standard d'échantillonnage et d'analyse des PCB d'autre part.

La maintenance et la gestion écologiquement rationnelle des transformateurs d'huile minérale contaminés par les PCB et le démantèlement de ceux qui sont désaffectés et contaminés par des PCB (pour procéder à leur élimination à l'étranger) doivent être réalisées dans une unité de traitement répondant aux normes internationales et en utilisant une technologie à faible émissions. Cela a été couvert par les résultats 2 et 3 du projet.

Afin de généraliser l'approche, le résultat 4 a été axé sur l'élaboration et la mise en œuvre d'une structure de gestion du suivi des projets conformément aux procédures de S & E du FEM et la mise en place d'un mécanisme de gestion des connaissances, de partage de l'information et de diffusion des capacités.

Une évaluation finale est obligatoire pour tous les projets de grande envergure financés par le FEM. Son but est de « fournir un compte rendu complet et systématique de la performance d'un projet achevé en évaluant sa conception, son processus de mise en œuvre, ses réalisations vis-à-vis des objectifs du projet, y compris tout changement convenu dans les objectifs pendant la mise en œuvre

du projet, et tout autre résultat ". Cette évaluation finale couvre toute la durée du projet PCB pilier II, de sa date de début en juillet 2010 au 31 décembre 2016.

Le tableau suivant présente la synthèse des notations pour chaque thématique abordée par l'évaluation finale selon les standards de l'ONUDI et du FEM. Le raisonnement, l'argumentaire et la justification de chaque notation est détaillé dans le corps du rapport.

Tableau de notations de l'évaluation finale :

NOTES D'EVALUATION

6 | Très satisfaisant (HS) : pas de lacunes

5 | Satisfaisant (S) : lacunes mineures

4 | Modérément satisfaisant (MS) : lacunes modérées

3 | Modérément Insatisfaisant (MU) : lacunes importantes

2 | Insatisfaisant (U) : problèmes majeurs

1 | Très insatisfaisant (HU) : de graves problèmes

Critères évalués :	**Notation :**
Atteinte des objectifs et des résultats du projet	
Mise en œuvre du projet	MS
• Efficacité	MS
• Pertinence	HS
• Efficience	MS
Durabilité des résultats du projet	ML
• Cadre institutionnel et risques de gouvernance	L
• Risques financiers	ML
• Risques socio-politiques	L
• Risques environnementaux	ML
Suivi et évaluation	HS
• Conception du S&E	S
• Mise en œuvre du plan de S&E (utilisation pour la gestion adaptative)	HS
• Budgétisation et financement pour les activités de S & E	S
Formulation du projet	
• Qualité de l'identification du projet et du processus de formulation	S
Conception du projet	
• Qualité de la conception du projet	S
Gestion du projet	S
• Approche de mise en œuvre	S
• Supervision et appui de l'ONUDI	S
NOTATION GLOBALE DU PROJET	S

Les principales conclusions de l'évaluation finale sont les suivantes :

- L'objectif de renforcement des capacités a été atteint en termes de connaissances et de sensibilisation à la question des PCB (le gouvernement marocain et la majorité des grands détenteurs de PCB s'engagent fermement à aborder la question des transformateurs contaminés par les PCB et les transformateurs désaffectés) et en termes de disponibilité d'expertise et d'infrastructures techniques locales (le pays bénéficie d'une usine de traitement de pointe qui fonctionne selon les normes internationales). Cependant, le projet PCB Pilier II n'a pas atteint l'objectif prévu en termes de volumes traités d'huile minérale contaminée par les PCB et des tonnages de métaux contaminés par les PCB.

- La réalisation des objectifs du projet a été impactée par les lacunes identifiées par l'évaluation finale, dans la conception du projet telles que le manque de caractérisation détaillée de l'inventaire des transformateurs (par âge, par état), l'estimation faible du coût unitaire du traitement, l'accent mis sur les secteurs public et semi-public ainsi que sur certaines grandes entreprises privées.

- Le projet PCB pilier II a été couronné de succès en ce qui concerne la sensibilisation sur les risques posés et les dangers liés aux PCB qui ont amené l'adhésion des grands détenteurs de PCB, les sociétés de distribution d'électricité et le gouvernement. Cependant, les PME qui détiennent un chiffre d'au moins 40% du parc des transformateurs ainsi que le secteur informel (les négociants en ferraille métallique) n'étaient pas suffisamment ciblées.

- L'activité de l'usine de traitement et par conséquent sa rentabilité, ont été impactées par l'absence d'une loi coercitive visant à assurer une gestion écologiquement rationnelle de l'équipement en service contaminé par les PCB et la faiblesse de l'application de la loi sur la gestion des déchets et l'élimination des transformateurs contaminés par des PCB désaffectés. Les détenteurs d'appareils contaminés aux PCB n'étaient pas motivés pour remettre leur équipement contaminé à l'usine de traitement.

- L'efficacité globale du projet a été affectée par les retards auxquels il a été exposé (le projet a duré 6,5 ans au lieu des 3 ans prévus à l'origine). Elle a également été affectée par la rentabilité insuffisante des résultats 2 et 3, pour lesquels la totalité de leur budget a été décaissée pour des résultats inférieurs aux attentes).

- Le Comité directeur du projet, qui comprenait des représentants interministériels mais principalement des grands détenteurs de PCB, n'a pas effectivement fourni à l'équipe de projet l'appui escompté en termes de propositions et d'orientations stratégiques.

- Il est probable que les avantages du projet seront soutenus, mais cette durabilité est fortement tributaire de l'exploitation continue de l'usine de traitement, du développement du cadre juridique et réglementaire et de son application ainsi que de l'implication du secteur privé qui n'avait pas été suffisamment ciblé.

- Le projet PCB pilier II étant un projet de démonstration, il a permis de mettre les bases d'un modèle de gestion rationnelle des appareils contaminés aux PCB à l'échelle du Maroc. Les leçons tirées de cette expérience sont transposables aux pays à économie similaire et les capacités développées peuvent être transférées aisément à ces pays.

Recommandations

Destinées au Ministère délégué chargé de l'environnement
• La finalisation et l'adoption du projet de loi sur les produits chimiques permettra d'inciter les détenteurs de transformateurs contaminés par des PCB à utiliser les services de la plateforme de traitement.
• Fournir aux inspecteurs de l'environnement les ressources et les moyens requis pour leur permettre d'appliquer la loi
• Mobiliser un financement supplémentaire à court terme pour assurer le fonctionnement de l'usine de traitement
• S'appuyant sur les enseignements tirés du projet PBC pilier II afin que les études de faisabilité puissent être mises à jour, des incitations financières et / ou un soutien technique aux PME pourraient être mises en place et la question de la participation du secteur informel pourrait être abordée
• Poursuivre la campagne d'information et de sensibilisation auprès des principales parties prenantes, mais également auprès du secteur privé et de la population
• Renforcer et institutionnaliser le système de suivi mis en place lors de la mise en œuvre du projet PCB Pilier II
• Lancer un audit financier afin de déterminer la structure des coûts du processus de traitement
Destinées à l'ONUDI
• Rationaliser les procédures administratives afin d'éviter les retards (la signature de la convention avec le pays concerné, la préparation des termes de référence, l'examen des aspects financiers des résultats de l'appel d'offres, etc.)
• Considérer plus de délégations dans le domaine de la gestion financière du projet et les appuyer avec les outils de suivi appropriés.
• Tirer parti des enseignements tirés de ce projet pour développer d'autres initiatives similaires
• Encourager la coopération sud-sud entre pays de la même région géographique (transferts de connaissances et de technologie).
Destinées au GEF
• Compte tenu du temps qui s'est écoulé entre la phase préparatoire (2007-2008) et le début effectif du projet (2010), la mise à jour des études de faisabilité pour ces types de projets devrait avoir lieu avant le lancement d'une offre (2014).
• Démarrage rapide de la deuxième phase de ce projet afin de prendre en compte les dynamiques positives générées par le projet PCB Pilier II et d'éviter le risque de fermeture de la plateforme de traitement en raison d'un manque d'activité.

Leçons apprises
• Les enseignements tirés du projet PCB pilier II, et que les projets futurs similaires pourraient envisager sont :
• Le fait que l'agence d'exécution du projet PCB Pilier II ait été désignée auprès du Ministère chargé de l'environnement en particulier, la direction responsable de la mise en œuvre de la politique de gestion et d'élimination des déchets dangereux du Ministère, a permis un ancrage institutionnel solide du projet et a facilité son appropriation.
• L'implication de tous les groupes cibles potentiels dans la préparation et la mise en œuvre du projet et l'évaluation des besoins de ces groupes cibles sont deux aspects du processus qui sont d'une importance critique pour l'intégration réussie de la gestion écologique des équipements à PCB. Cette implication exige que l'équipe du projet établisse un climat de communication et de formation à tous les niveaux sur les objectifs du projet, son cadre conceptuel et son approche. De tels éléments apporteraient à la planification des détenteurs un degré appréciable d'innovations et apporteraient de nouvelles connaissances à certaines des institutions impliquées (Santé, Douanes, etc.).
• Le soutien mutuel et la synergie avec d'autres partenaires de développement travaillant sur des thèmes identiques dans le domaine du renforcement des capacités et de la gestion des déchets dangereux contribueraient à catalyser les actions du projet. Idéalement, cela pourrait se faire en i) participant activement au processus d'amélioration des outils méthodologiques, ii) en soutenant la diffusion et l'utilisation de ces outils pour atteindre les acteurs locaux aussi loin que possible et iii) en évitant la redondance et la répétition d'actions similaires avec les mêmes bénéficiaires.
• La disponibilité de données factuelles fournit les arguments nécessaires pour poursuivre le développement du cadre juridique et réglementaire et la gestion des déchets dangereux : Dans le cadre du projet PCB pilier II, un inventaire des dispositifs PCB a été élaboré et les outils nécessaires à la prise de décision ont été développés (cartographie des équipements de PCB, des sites de déchets et des sites potentiellement contaminés).
• L'évolution du contexte national dans lequel se déroule le projet doit être pris en compte dans les différentes phases du projet.
• La mise en service de la plateforme de traitement a permis de mettre à l'essai un modèle de gestion industrielle pour le traitement des équipements contaminés par les PCB et pour l'élimination des transformateurs PCB purs. Ce modèle pourrait être reproduit dans des pays ayant une structure économique similaire. Les connaissances techniques et de gestion pourraient être partagées entre des pays partageant une langue similaire. Ils pourraient également être partagés entre tous les pays africains dans le contexte des initiatives de coopération Sud-Sud. De tels modèles de partage des connaissances pourraient également être étendus aux pays d'Europe de l'Est et d'Amérique du Sud.
• L'exploitation de la plateforme de traitement a permis au Maroc de mettre en place une référence pour le de traitement à la tonne d'huile contaminée et / ou par tonne d'équipement contaminé. Ce référentiel de prix pourrait servir de référence pour le développement de projets similaires dans la région, dans des pays ayant une structure économique similaire ou à travers le continent africain.
• Le projet PCB pilier II pourrait être considéré comme une étude de cas idéale pour démontrer comment une approche holistique de la gestion des PCB pourrait être prise en compte.

I. Introduction

The subject of this evaluation is the second pillar of an overarching project on the management of PCBs in Morocco, jointly implemented by the UNDP and the UNIDO. The project is entitled "Environmentally sound management and disposal of PCB-contaminated transformers in Morocco" (hereafter referred to as "The PCB project Pillar II").

This report presents the findings of the terminal evaluation of the PCB project Pillar II that took place in March – April 2017. The PCB project Pillar II has received from the GEF a 2,437,600USD grant. The signatures of the UNIDO and the Government of Morocco jointly sealed the project document in September 2011 for a project duration of 3 years. The PCB project was actually initiated in July 2010 and was concluded on 30 December 2016.

II. Evaluation objectives, methodology and process

A Terminal Evaluation (TE) is mandatory for all GEF-financed full-size projects. Its purpose[2] is to "provide a comprehensive and systematic account of the performance of a completed project by assessing its design, process of implementation, achievements vis-à-vis project objectives endorsed by the GEF including any agreed changes in the objectives during project implementation, and any other results".

This TE covers the whole duration of the project, from its starting date in July 2010 until 31 December 2016.

The TE was carried out by two independent consultants working as a team. Neither Nadia Bechraoui, the team leader, nor Khalid Anouar, the national evaluation consultant, have participated in the preparation, formulation and/or implementation of the project and, therefore, there can be no conflict of interest on their part that could affect the TE.

The key question underlying this TE relates to whether the project has achieved, or is likely to achieve, the project objective, i.e. to whether "by the end of the project, Morocco would have treated and reclaimed at least 3,000 tons of PCB-contaminated mineral oil and 2,000 tons of PCB contaminated electrical equipment"[3].

The Evaluation team has followed the "GEF's 2008 Guidelines for Implementing and Executing Agencies to conduct Terminal Evaluations", as well as the "UNIDO Evaluation policy" and the "UNIDO Guidelines for the Technical Cooperation Programme and Projects". It was also guided by the terms of reference (TORs) developed by the UNIDO in Vienna.

The methodology adopted for the TE has included a desk review of all relevant documents related to the project, a briefing mission (20-21 March 2016) with the UNIDO Project Manager in Vienna, the in-country mission (27-31 March 2016), which included face-to-face meetings and group interviews with main stakeholders such as project staff, project partners and project beneficiaries (please refer

[2] In "Guidelines for GEF Agencies in conducting terminal evaluations", Evaluation document n°3, 2008, GEF Evaluation Office.

[3] Terms of reference of the terminal evaluation of the UNIDO project "Safe BCP management programme in Morocco, pillar II, p10.

to Annex 2 for the list of individuals and officials who took part), a focus group with members of the Project Steering Committee and field visits to laboratories and the treatment plant concerned. While at the end of the mission the PSC was formally briefed with regard to the preliminary findings, on 30 April 2017, the overall conclusions and recommendations, as well as the lessons learnt, were presented to the stakeholders and discussed at the UNIDO HQ, on 3 May 2017.

The Theory of change (TOC) was re-constructed on the basis of information provided in the project document and was shared with the UNIDO Project Manager and the Project Coordinator to get their approval. The TOC outlines the underlying logic of the project, from outputs through outcomes towards impact, which was designed and which will be compared to the actual strategy applied during project's implementation.

The Semi-direct interviews that were conducted were based on a series of questions included in the evaluation matrix (please refer to annex 5).

Given that the same national evaluation consultant, now involved in the TE, had also carried out the mid-term evaluation (MTE) at the end of 2015, the TE checked again and validated some of those initial findings and recommendations and included them in this report.

As a reminder, performance ratings applied by the Evaluation team were aligned with GEF guidelines.

For project objectives and outcomes and M&E system[4], the ratings are as follow:

- Highly Satisfactory (HS): There are no shortcomings in the achievements of the objectives/ in the M&E system.
- Satisfactory (S): There are minor shortcomings in the achievements of the objectives/ in the M&E system.
- Moderately Satisfactory (MS): There are moderate shortcomings in the achievements of the objectives/in the M&E system.
- Moderately Unsatisfactory (MU): There are significant shortcomings in the achievements of the objectives/ in the M&E system.
- Unsatisfactory (U): there are major shortcomings in the achievements of the objectives/ in the M&E system.
- Highly Unsatisfactory (HU): There are severe shortcomings in the achievements of the objectives/ in the M&E system.

Relevance and Effectiveness are critical criteria. Therefore, the overall rating of the project for achievement of objectives and outcomes may not be higher than the lowest rating on either of these two criteria.

All other ratings will be on the following six-point scale:

- Highly Satisfactory (HS): Excellent
- Satisfactory (S): well above average
- Moderately Satisfactory (MS): average
- Moderately Unsatisfactory (MU): below average
- Unsatisfactory (U): poor
- Highly Unsatisfactory (HU): very poor

[4]Includes M&E design, M&E plan implementation and budgeting and funding for M&E activities; in addition, the overall rating for the M&E systems will not be higher that the rating on M&E plan implementation.

Sustainability and each of its four dimensions[5] for the project outcomes were rated as follows:

- Likely (L): there are no risks threatening this dimension of sustainability
- Moderately Likely (ML): there are moderate risks threatening this dimension of sustainability
- Moderately Unlikely (MU): there are significant risks threatening this dimension of sustainability
- Unlikely (U): there are severe risks threatening this dimension of sustainability

The evaluation process was fully participatory in nature in all its phases, from the preparation of the mission agenda to the sharing of the preliminary conclusions. Additional consultations, following the in-country mission, were carried out either by the national evaluator or through the medium of emails, to check over potential omissions and/or factual errors.

The evaluation team encountered a degree of constraint due to the combination of time and mobility factors. However, while the limited 5-day duration of the in-country mission, as well as the distances involved, had not allowed them to meet up with all parties involved in the project, the range of interviewees was sufficiently wide to represent adequately the variety of the parties involved and to make it possible to collect perceptions and points of views from different sources. The triangulation process applied to the responses was made possible through focusing on the same questions. Useful conclusions could therefore be drawn regarding the PCB project Pillar II.

III. Country and project background

Morocco has recently achieved a good degree of consolidation of its macroeconomic framework. Public finances were continuing to improve in 2014 thanks to the reduction of recurring expenditures and particularly as a result of a substantial cut to the fuel subsidy budget. With an average economic growth rate of 4.2 percent during the 2007-2015period, poverty has been significantly reduced, from 15.3 percent in 2001 to 4.8 percent in 2014.

Since the late 1990s, the environmental sustainability agenda has moved from representing a fringe policy item to becoming national priority. Besides reinforcing the principles of good governance and the protection of individual freedoms and rights, the new 2011 Constitution, through its Art 31, compels the state and its agencies to work towards ensuring equal access to a healthy environment and sustainable development.

Further to the Parliament approving the Framework Law on Environment and Sustainable Development in March 2014 (Law 99-12) – which sets the rights and obligations of the State for the protection and preservation of the environment and the sustainable use of domestic natural resources, the Government has now finalized its National Sustainable Development Strategy (NSDS).

The NSDS articulates the country's Green Growth goals with a view to aligning the strategies of the various sectors along common long-term sustainability objectives. Legislation is underway to regulate investments in sensitive areas such as coastal zones, and to improve existing legislation applying to critical sectors such as the water sector. The Government is also making important strides with the emergence and expansion of sectors such as aquaculture and ecotourism in order to support growth and job creation in rural areas. In respect of the management of natural resources, a new National Plan for the Water Sector has been finalized. Its aim is to put into motion the

[5]Institutional, financial, socio-political and environmental; overall rating for sustainability will not be higher than the rating of the dimension with lowest ratings.

government vision for sustainable water management which is currently enshrined in the legislative structure.

As concerns the institutional framework, the industrial sector falls under the Ministry of Industry, Trade and New Technologies. This Ministry is the principal counterpart of UNIDO. Other Ministries involved in UNIDO interventions include the Ministry of Foreign Trade, the Ministry of Agriculture and the Ministry of the Environment. In addition, mention should be made of Agencies under the supervision of these Ministries, such as the National Agency for the Promotion of Small and Medium-Sized Enterprises (ANPME) and Maroc Export, among others. Depending on the geographical coverage of the interventions, the Regional Development Agencies who are some of the important partners of UNIDO are the Southern Agency (Agence du Sud) and the Oriental Agency (Agence de l'Oriental), as well as the Regional Investment Centers (Centres régionaux pour l'investissement).

At the private sector level, we can mention the General Confederation of Enterprises of Morocco (CGEM), its member associations subdivided by sectors and the Chambers of Commerce, Industry and Services and their Federations. In this context, mention should also be made of the following structures emanating from UNIDO support projects, in particular the Moroccan Clean Production Center (CMPP) based within the CGEM and the Moroccan Association of Export Consortia (AMCE).

Morocco signed and ratified the Stockholm Convention on the Persistent Organic Pollutants (POPs) on 15 June 2004 and is committed to implementing all necessary measures to ensure the conformity and implementation of the provisions of this Convention, including the disposal of all equipment containing PCBs by 2025 and of their waste by 2028. Morocco presented its National Implementation Plan (NIP) for POPs to the Stockholm Convention Secretariat in May 2006.

The NIP has identified the issue of PCBs as a top priority requiring immediate attention and action. The new Constitution of 2011 gives primacy over domestic laws to the international conventions duly ratified by Morocco within the framework of the provisions of the Constitution and the laws of the Kingdom, and of the publication of these conventions. As a consequence, it needs ensure the harmonization of the relevant provisions of its national legislation with the provisions of those Conventions.

In 1990, as was done by the international community across the board, Morocco agreed to enter into a commitment to achieve the Millennium Development Goals by 2015. Subsequently, the country officially adopted the new agenda for sustainable development by 2030. This agenda which includes 17 Sustainable Development Goals (SDGs) came into force in January 2016. The PCB Pillar II project is in line with the SDGs. The project supports the efforts initiated by Morocco at the institutional and regulatory levels through the strengthening of the capacities of the local development actors for the adoption of an environmentally sound management of PCBs.

Among the factors which are facilitating this process, are the adoption of the National Charter for the Environment and Sustainable Development and the ongoing work on advanced regionalization. Moreover, the commitment of the government and the awareness of the stakeholders in respect of the issue of the environmentally sound management of PCBs have helped to create favorable conditions underpinning the different phases of the PCB project pillar II.

The fact sheet of the PCB project Pillar II is as follows:

Table 1: Project fact sheet

Project Title	Safe PCB Management Programme in Morocco, Pillar II, Environmentally Sound management and Disposal of PCB- Contaminated Transformers in Morocco
GEF project ID	3883
UNIDO project number	104051
Country(ies)	Morocco
GEF Focal Area and Operational Program	Chemical and Wastes - Persistent Organic Pollutants
GEF Agencies (Implementing Agency)	UNIDO
Project Executing Partner	Direction des Programmes et des Réalisations (former Direction de la Surveillance et de la Prévention des Risques) of the Ministry of Energy, Mining, Water and Environment.
Project Implementation Start Date	July 2010
Project Duration (Months)	77
GEF Grant (USD)	2,437,600
UNIDO Agency Fee (USD)	243,760
UNIDO Inputs (USD)	50,000
Counterpart Inputs - Co-financing (USD) at CEO Endorsement	4,856,000

Source: Project Document

Historically, until early the 80s, many of the big electric transformers and capacitors installed in Morocco contained PCB as insulating oils, known under their commercial names “Pyralene” and “Askarel”. Then, import of PCBs was stopped.

As PCBs have not been produced for some years, equipment containing PCBs have not been renewed and are ageing with potential leakages and electric failures increasing the risk of fires, consequently being a threat to humans and ecosystems.

In addition, due to the various changes in the ownership of the transformer manufacturers, the exact magnitude of the quantities that have been imported into the country remained unknown.

Furthermore, there was a generally low-level of awareness on the risks and threats stemming from PCB contaminated electrical equipment and no legislation banning or restricting the use of PCBs in any applications before materials are classified as waste.

Some companies among major PCB holders have taken voluntary action and decided to carry out retrofitting of PCB containing transformers after having found considerable contaminated oil in their equipment. But these were isolated initiatives and certain had even counter-productive effect in contributing to the expansion of the PCB contamination.

It was only when the Stockholm convention on Persistent Organic Pollutants (POPs) was ratified that the Government of Morocco prompted a clear commitment and action and raised the PCB issues higher on the agenda. The PCB project Pillar II is a direct continuation of the POPs' NIP in the area of PCB management.

Morocco has conducted two inventories of PCB equipment, the first one in 2002 by the Ministry in charge of the Environment and the second one in 2004-2005 within the framework of the POPs Enabling activity project.

During the project's preparatory phase (from December 2007 to February 2008), several statistical analyses were carried out to estimate the total park of transformers available in Morocco (about 100,000). The analytical testing of transformers concluded that there would be a significant market opportunity for technology vendors in the country (about 20 to 25% of the transformers tested had a level of contamination above 50 ppm). The feasibility studies also undertaken during the preparatory phase were aimed at selecting the most environmentally and economically sound option for Morocco, among the different technologies available for the treatment of PCBs

In parallel, the GIZ had planned to support Morocco in building a central treatment and disposal facility for physical-chemical treatment, oil recycling, medical waste treatment and a special engineered landfill for hazardous waste. The GIZ project was still at the feasibility study stage and was foreseen to be ready by 2010-2011. A letter of cooperation was signed between UNIDO and GIZ in order to avoid any duplication of work during the implementation of the PCB project pillar II.

IV. Project Assessment

A. Design

The Evaluation team has reviewed the analysis of project design and formulation undertaken in the mid-term evaluation and confirmed the initial findings which are presented thereafter. In addition, the evaluators have observed that no major change or modification has been made to the project document since the mid-term evaluation.

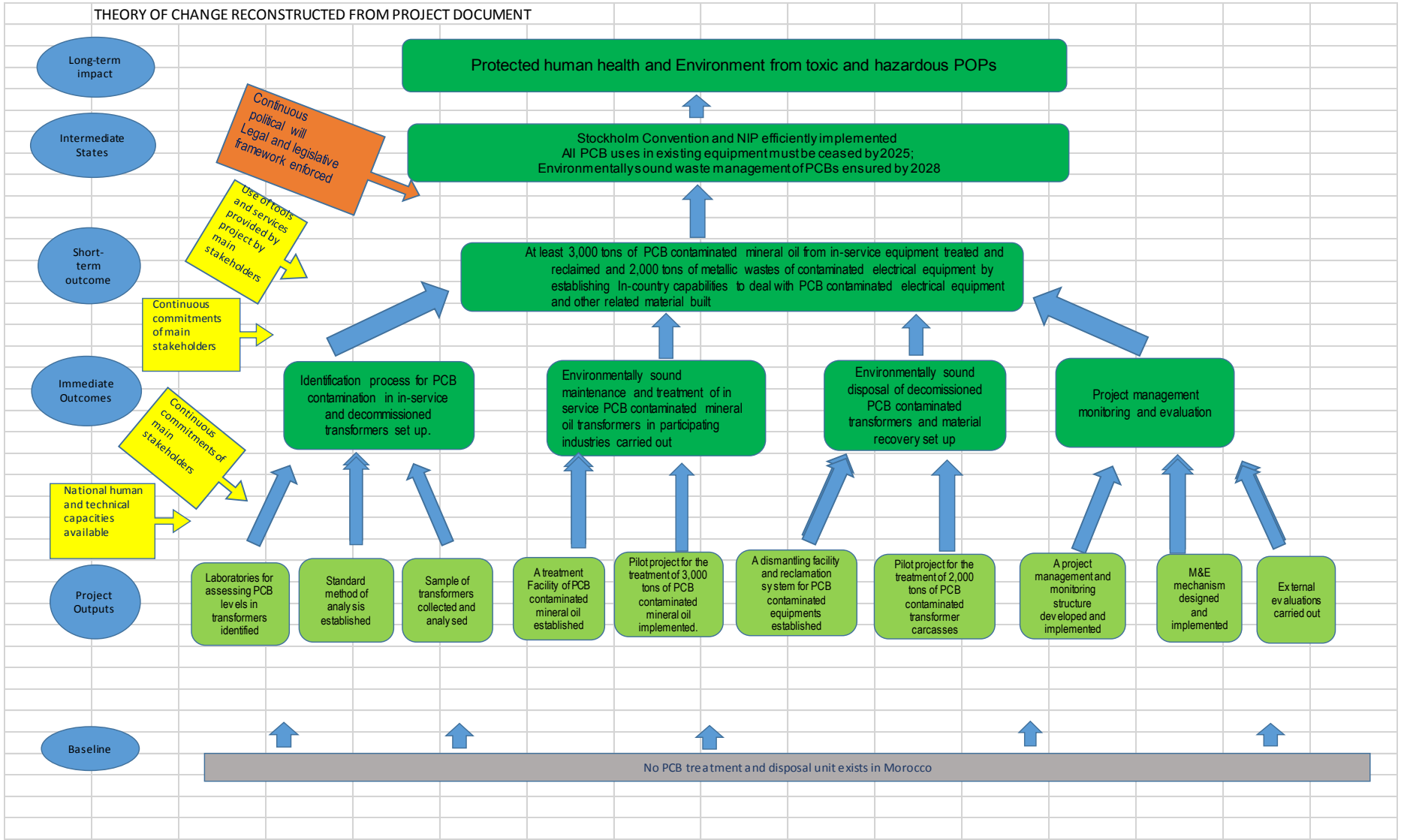
a. As regard to the Project Logical Framework

In its Annex A, the PCB project pillar II presents a comprehensive log frame matrix which includes objectives and outcomes as well as impact indicators. This matrix is supplemented by the targets and sources of verification as well as the assumptions and risks that contribute to the expected results.

There is no description of the baseline situation of the impact indicators because it was acknowledged that at the start of the project, there was no PCB equipment and waste treatment and disposal unit in Morocco. In addition, section A2 of the project document includes a detailed analysis of the threats, root causes and barriers to the implementation of the pillar II PCB project. The barriers are assessed according to several categories such as the legal, awareness and know-how, technical capacity, economic and industrial/trade policy barriers.

b. As regard the Project Intervention logic

The design did not include a formal theory of change diagram. The latter was reconstructed by the evaluation team based on information provided in the project document.


THEORY OF CHANGE RECONSTRUCTED FROM PROJECT DOCUMENT
Long-term impact
Intermediate States
Short-term outcome
Immediate Outcomes
Project Outputs
Baseline
Protected human health and Environment from toxic and hazardous POPs
Stockholm Convention and NIP efficiently implemented
All PCB uses in existing equipment must be ceased by 2025;
Environmentally sound waste management of PCBs ensured by 2028
Continuous political will Legal and legislative framework enforced
Use of tools and services provided by project by main stakeholders
Continuous commitments of main stakeholders
At least 3,000 tons of PCB contaminated mineral oil from in-service equipment treated and reclaimed and 2,000 tons of metallic wastes of contaminated electrical equipment by establishing In-country capabilities to deal with PCB contaminated electrical equipment and other related material built
Continuous commitments of main stakeholders
National human and technical capacities available
Identification process for PCB contamination in in-service and decommissioned transformers set up.
Environmentally sound maintenance and treatment of in service PCB contaminated mineral oil transformers in participating industries carried out
Environmentally sound disposal of decomissioned PCB contaminated transformers and material recovery set up
Project management monitoring and evaluation
Laboratories for assessing PCB levels in transformers identified
Standard method of analysis established
Sample of transformers collected and analysed
A treatment Facility of PCB contaminated mineral oil established
Pilot project for the treatment of 3,000 tons of PCB contaminated mineral oil implemented.
A dismantling facility and reclamation system for PCB contaminated equipments established
Pilot project for the treatment of 2,000 tons of PCB contaminated transformer carcasses
A project management and monitoring structure developed and implemented
M&E mechanism designed and implemented
External evaluations carried out
No PCB treatment and disposal unit exists in Morocco

However, the project document includes an analysis that has been carried out on the basis of the logical framework available to check whether the various stages selected for its implementation contribute to achieving the assigned objective.

Analysis of the Coherence between the objective and the outcomes

As previously seen, the overall objective of the PCB project Pillar II was to assist Morocco to effectively and efficiently implement the Stockholm Convention on POPs in specifically treating and reclaiming nearly 3,000 tons of PCB-contaminated mineral oil from in-service equipment and decontaminating 2,000 tons of PCB wastes by establishing the in-the-country capacity to deal with PCB contaminated electrical equipment and other related material. This specific objective had to be achieved through the achievement of the four expected outcomes of the project.

Outcome 1 dealt with the identification of analytical laboratories that had the capacity to analyze PCBs on one hand and the establishment of a standard PCB sampling and analysis protocol on the other hand. This was the first step to be taken by the PCB Project Pillar II to establish a reliable and documented inventory of in-service or decommissioned transformers that are either pure PCBs or PCB-contaminated.

The maintenance and the environmentally sound management of PCB-contaminated mineral oil transformers and the dismantling of those that are decommissioned and PCB-contaminated in order to proceed for their disposal abroad were to be carried out within a treatment unit meeting international standards and using a low emission and non-incinerating technology. This was covered by outcomes 2 and 3 of the project. However, it should be noted that initially two separate facilities were expected to be built, one treatment plant and another one for the conditioning and the dismantling of the decommissioned contaminated transformers.

The decision taken to merge the two facilities had no impact on the project's objective and its achievements. In addition, during the preparation phase of the PCB Pillar II project, an analysis of the different existing technological treatment options and a feasibility study were carried out in order to identify the most appropriate one in the Moroccan context and to estimate the capacity needed as well as the volume of oils to be decontaminated.

In order to generalize the approach, Outcome 4 focused on the development and implementation of a project follow-up management structure in accordance with the GEF M&E procedures and the establishment of a mechanism for Knowledge Management, information sharing and dissemination of capacities.

In the light of the above, there was a good coherence between the objective of the project and the expected outcomes. The log frame was relevant because it was based on a clear and detailed timetable for achieving results, which allowed the activities selected to be sorted out.

Analysis of the coherence between outcomes and proposed outputs/activities

Overall, outputs/activities enabled the achievement of the expected outcomes of the project. Table 6 in Section G of the project document provides realistic and quantified targets that clearly translated the proposed impact indicators.

In addition, the financial analysis provided in section C7 of the project document supports the quantified targets established to analyze and decontaminate up to 3, 000 tons of PCB-contaminated mineral oil and 2,000 tons of pure PCBs transformers disposed as part of the UNDP implemented Pilar I PCB project as well as all excess equipment drained and contaminated by low levels of PCBs. In

general, dechlorination costs are highly dependent on the concentration of PCBs in the mineral oil. The estimated cost of applying the various options was in the range of US $ 1.2-2.0 per kg of PCB-contaminated oil for PCB levels between 50 and 5,000 ppm. The profitability analysis concluded that the estimated cost for Morocco was consistent with that of Slovakia and is lower than the international prices for the treatment of this type of waste.

c. As regard the project strategy

In order to overcome the different barriers identified, the project intervention strategy was based on three main outcomes: Identification of the park of transformers, maintenance and environmentally sound management of these transformers and disposal / recovery of equipment from out-of-service transformers.

The several studies and consultations carried out by the UNIDO teams during the preparatory phase assessed the capacities of the analytical laboratories, the potential of the park of pure or contaminated PCB transformers in Morocco, the capacities of the holders and their knowledge of the impacts of PCBs, and the treatment technologies available for PCB-contaminated transformers. The information obtained from this phase made it possible to discard incineration as an alternative treatment or disposal in Morocco and to retain the strategy of dechlorination and re-use of decontaminated mineral oils. Reuse is based on the retrofilling technique which is not economically viable for pure PCB transformers. The latter must be decommissioned and dismantled, their contents and their carcasses incinerated in facilities outside Morocco.

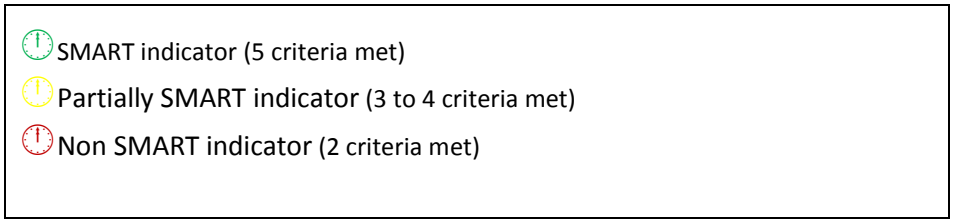
The results of the preliminary tests showed that the inventory of PCB-contaminated mineral oil in Morocco was approximately 13,000 metric tons, distributed in nearly 30,000 transformers. The project adopted the objective of (i) decontaminating at least 3,000 tons of PCB-contaminated mineral oil over the life of the project and (ii) dismantling and decontaminating at least 2,000 tons of PCB-contaminated transformer carcasses, including 239 tons of decommissioned transformers from Pillar I of the PCB project implemented by UNDP.

The combination of the results proposed by the PCB Pillar II project presented a coherent logic to establish an institutional basis for the project activities and their translation on the field into concrete environmentally sound management of PCB-contaminated transformers. The allocated budget was defined on the basis of a cost-benefit analysis of the treatment and disposal operations.

d. Analysis of Project Indicators

The targets defined for the PCB project Pillar II are for the most part Specific, Measurable, Attainable, Relevant and Trackable, and therefore measurable over the period of the project. This enables an assessment of the project's performance against the reference conditions at start-up.

The next analysis assesses if the chosen indicators are SMART according to the table below:



Outcome 1: Identification process for PCB-contamination in in-service and decommissioned transformers set up.

Indicator	Evaluation	Comments
Level of contamination for in-service transformers to be cleaned and for decommissioned transformers to be dismantled evaluated.	SMART	• Specific because the action is clearly established. • Measurable because its target is fixed at 3,000 tons of contaminated mineral oil analyzed and 1,000 in- service medium and large size transformers. • Its attainability can be assessed because the tools are specified (adequate routine analysis process for each transformer) • Relevant as it relates directly to the activity • Trackable because time-bound to the project completion date.

Outcome 2: Environmentally sound maintenance and treatment of in-service PCB contaminated mineral oil transformers in participating industries carried out.

Indicator	Evaluation	Comments
PCB contaminated mineral oil treatment facility established	SMART	• Specific because the action is clearly established. • Measurable because its target is one treatment unit. • Attainability can be measured thanks to the tenders and contract documents • Relevant as it relates directly to the activity • Trackable because time-bound to the project completion date.

Outcome 3: Environmentally sound disposal of decommissioned PCB contaminated transformers and material recovery set up.

Indicator	Evaluation	Comments
Decommissioned transformers dismantling centre established.	SMART	• Specific because the action is clearly established. • Measurable • Attainable and achievable • Relevant as it relates directly to the activity • Trackable because time-bound to the project completion date.
PCB contaminated metal recovery facility established.	SMART	• Specific because the action is clearly established. • Measurable • Attainable and achievable • Relevant as it relates directly to the activity • Trackable because time-bound to the project completion date.

Outcome 4: Project Management, Monitoring & Evaluation.

Indicators	Evaluation	Comments
M&E structure established	SMART	• Specific because the action is clearly established. • Measurable • Attainable and achievable • Relevant as it relates directly to the activity • Trackable because time-bound to the project completion date.
M&E procedures established	SMART	• Specific because the action is clearly established. • Measurable • Attainable and achievable • Relevant as it relates directly to the activity • Trackable because time-bound to the project completion date.

e. As regard stakeholders' analysis

All the actors likely to be interested in the project had been involved ever since the project had been at its design stage. These include various ministries[6], major public enterprises holding PCBs[7], private electricity distribution companies and service companies (for PCB treatment, collection and transport of hazardous waste and its disposal) and laboratories. Several bodies were also set up for the implementation of the PCB project Pilar II:

Table 2: Stakeholders

Body	Responsibilities
Implementing Agency (IA)	**ONUDI** - The general management of the project and of its funds - Establishing a focal point to assist with the implementation of the project - Assisting the National Executing Agency (NEA) with: a) carrying out the project, by providing quick assistance, and b) with fulfilling its obligations under the Stockholm Convention.
National Executing Agency (EA)	**National Project Director within the Directorate for Programs and Achievements of the Secretariat of State in charge of the Sustainable Development**: - Focal point for the implementation of the Stockholm Convention in Morocco - In charge of the implementation - Ensures a close coordination with all the stakeholders - Chairman of the National Commission on PCBs.

[6] Delegated Ministry of Environment, Ministry of Industry, Ministry of Interior, Ministry of Health, Department of Energy.

[7] Office Chérifien des Phosphates (OCP), Office National de l'Eau Potable (ONEP), Office National de l'Electricité (ONE)

Body	Responsibilities
Project Management Unit (PMU)	Includes the National Project Coordinator (NPC) and an Administrative and Financial Assistant The PMU manages all national project activities, including the recruitment and supervision of national experts. It cooperates with UNIDO on procurement, product delivery and the organization of project activities. Responsibilities include: - Periodic preparation of the work plans - Periodic preparation of progress reports for UNIDO - Preparation of TORs - Submission of periodic financial reports to UNIDO
Project Management Team (PMT)	Includes several executive officers of the DPR/DME, the Director and the PMU Its main responsibilities are: - The supervision of the entire project - The review and validation of the annual work plans, the TORs and all reports prepared by the Coordinator - Proposes corrective actions and submits these proposals to the PSC
Project Steering Committee (PSC)	- meets annually to review the achievements of the 2 pillars in the past years, in order to approve the action plans for the year ahead and to validate the strategic decisions that were taken within the framework of the project, such as the revision of the cost of treatment per unit, the quantitative targets of contaminated transformers and oil to be processed by the consortium, etc.
National Commission for PCBs (NC-PCB)	- Project management arrangements are placed under the authority of the PCB Commission. - Provides short term technical support at the legal and regulatory level while gradually transferring responsibilities to the permanent structures of the State.

The National Commission on PCBs (NC-PCB) includes representatives of all institutional stakeholders and is in charge of underpinning the regulatory framework for the country's PCB management and elimination. It is established by decree and is responsible for ensuring that the provisions of the Stockholm Convention on POPs and especially on PCBs are respected and implemented.

The Project Steering Committee (PSC) includes representatives of the different ministries involved in the project, of major PCB holder companies, members of the National commission on PCBs belonging to other institutions as well as those representatives of the UNDP and UNIDO. Its role was to provide the overall guidance in terms of policy for the project, to validate progress reports and validate annual work plans. The evaluation was able to establish that the PSC was well informed on the project's progress and issues, and that the Department in charge of local authorities within the Ministry of Interior was playing an active and critical role in encouraging the public electric companies under its responsibility to take part. It also established that meetings had provided the main opportunities for PCB holder companies to raise and discuss the difficulties they had encountered during the project's implementation.

At the operational level, the project has involved all the above-mentioned stakeholders in information, awareness-raising and communication procedures, as well as in technical training activities on the environmentally sound management and elimination of PCBs. It should be stressed, however, that neither the SMEs nor the informal sector (metal scrap dealers), which is more difficult to reach out to, have been sufficiently targeted.

f. Analysis of assumptions

The Project document includes a series of identified risks for each expected outcome. The risks presented in section C7 of the document are all external risks that might hinder the project's implementation. Measures to mitigate and manage them are also included. However, several other risks have not been anticipated.

These risks have been the following:

1) the lack of an adequate legal framework to manage PCB contaminated transformers,
2) the delays in operating the treatment plant which have impacted the project's targets,
3) the non-completion of the GTZ project relating the National Center for Hazardous Waste Disposal,
4) the variations in the assumptions of profitability of the treatment plant due to the lack of updating of the financial analysis carried out during the preparation phase of the project.

Overall, project design is rated "Satisfactory" (S). Detailed ratings are included in the following tables (2 & 3).

Table 3. Rating criteria for quality of project identification and formulation process (LFA process)

Evaluation issue	Rating
1. Extent to which the situation, problem need/gap is clearly identified, analyzed and documented	S
2. Adequacy and clarity of the stakeholder analysis (clear identification of end-users, beneficiaries, sponsors, partners and clearly defined roles and responsibilities in the project	S
3. Adequacy of project monitoring and evaluation design	S
4. Overall LFA design process	S

Table 4. Quality of project design (LFM)

Evaluation issue	Rating
1. Clarity and adequacy of outcome (clear, realistic, relevant, addressing the problem identified). Does it provide a clear description of the benefit or improvement that will be achieved after project completion?	**HS**
2. Clarity and adequacy of outputs (realistic, measurable, adequate for leading to the achievement of the outcome)	**HS**
3. Clarity, consistency and logic of the objective tree and its reflection in the LFM results hierarchy from activities to outputs, to outcome and to overall objective	**S**
4. Indicators are SMART for Outcome and Output levels	**HS**
5. Adequacy of Means of Verification and Assumptions (including important external factors and risks)	**MS**
6. Overall LFM design quality	**S**

B. Ownership and relevance

The final evaluation has confirmed the findings of the mid-term review, which is that the PCB project Pillar II falls in line with:

N**ational development priorities** as defined in the Moroccan NIP for PPPs, which has identified the following three priorities: "Development of national capacities with regard to POPs management", "Updating the national legislation to the Convention of Stockholm obligations into account" and "Development of a strategy for eliminating equipment containing PCBs from the national environment and destruction of oils contaminated by PCBs, in an environmentally sound manner".

The 2012-2016 United Nations Development Assistance Framework (UNDAF) and the Country Programme Action Plan, which frame the cooperation between the Kingdom of Morocco and the United Nations System, namely through "protecting the environment and ensuring sustainable development" and "reinforcing the capacity of national institutions in the elaboration and implementation of policies and action plans, in conformity to rules and regulations and international commitments".

The target groups, including the Moroccan Government who are keen to ensure that the Stockholm convention is adhered to, and who concern themselves with matters of health and of protection of the environment; the large PCB owners for whom it forms part of their environmental policy; the remainder of the PCB owners who are concerned by the technical and financial burdens of eliminating PCBs; and the technology providers for whom it represents a business opportunity. All parties have made clear their interest in participating in the project and in pressing forward with the replacement of the country's PCB-contaminated transformers.

UNIDO's mandate and thematic priorities, which relate to cleaner production, industrial efficiency and the management of hazardous substances. In addition, thanks to its ability to implement projects in priority areas of the Stockholm convention, UNIDO enjoys direct access to POPs-related GEF resources.

The Global Environment Facility (GEF)'s Strategic Program SP2 "Partnering in investments for NIP implementation", the aim of which is to put to an end the use and release of PCBs into the environment.

Ownership and relevance are rated "Highly Satisfactory" (HS)

C. Effectiveness

a. Achieving outputs

The PCB project Pillar II includes 4 independent but inter-related outcomes, every one of which corresponds to a series of outputs. The review of the outputs produced during the project implementation is presented below:

Outcome 1: An identification process for PCB contamination in in-service and decommissioned transformers has been set up.

Outputs	Actual outputs delivered
Output 1.1: laboratories have been selected for assessing PCB levels in transformers.	Call for tenders launched for the selection of a laboratory to assess the degree of PCB contamination of transformers across all of the territory of Morocco. OKSA Morocco selected in 2012.
Output 1.2: A standard method of PCBs analysis has been established.	A study aimed at defining a methodology to identify potentially PCB-contaminated transformers was carried out in March 2011 (Tools for data collection provided), as well as a review of the different methods for analyzing PCBs content in transformers, mineral oils and wastes which was carried out in January 2012. These two studies led to the establishing of a standardized protocol, including selection criteria for the identification of potentially PCB-contaminated transformers, which received the approval of the National Commission on PCBs.
Output 1.3: Samples of transformers are collected and analyzed.	A campaign to analyze potentially contaminated transformers was launched by OKSA Morocco. A sample of 6,000 transformers (higher than the 1,000 initially planned) has been analyzed in order to shed light on the distribution of the number of transformers in relation to the level of PCB contamination (between 50 and 500 ppm, between 500 and 5,000 ppm, above 5,000 ppm and those which are pure PCBs).

Outcome 2: Environmentally sound maintenance and treatment of in-service PCB-contaminated mineral oil transformers in participating industries have been carried out.

Outputs	Actual outputs delivered
Output 2.1: A PCB-contaminated mineral oil treatment facility and PCB contaminated metal recovery system has been established.	First call for tender to recruit a consortium in charge of establishing the treatment launched in 2012 but unsuccessful. Second call for tender launched end of 2013. Following a call for tenders won by the TREDI-MME consortium, a contract was signed between TREDI and UNIDO in March 2014. An Environmental Impact Assessment for the establishment of the treatment facility was carried out in July 2014 and approved in January 2015. The Local Authority's authorization for building the treatment plant was delivered in March 2015. The treatment plant was completed in July 2015 in Bouskoura. It was inaugurated in November 2015 and started its operations in December 2015. It was built as a state-of-the-art plant and technically up-to-date (confirmed by the audit and the effectiveness standards control carried out in September 2015).

Outputs	Actual outputs delivered
Output 2.2: 3,000 tons of PCB-contaminated mineral oil have been treated.	According to the data provided by the PCU, by 18 April 2017, 88,6 tons of mineral oil had been decontaminated in the treatment facility. Countercheck analyses were carried out by OKSA Morocco, which confirmed these results.

Outcome 3: Environmentally sound disposal of decommissioned PCB-contaminated transformers and material recovery has been set up.

Outputs	Actual outputs delivered
Output 3.1: A PCB contaminated mineral oil dismantling facility and PCB-contaminated metal reclamation system has been established.	A state-of-the-art and technically up-to-date dismantling facility and reclamation system was established in July 2015 in Bouskoura (Audit and effectiveness standards control carried out in September 2015).
Output 3.2: Up to 2,000 metric tons of PCB-contaminated transformer carcasses, including the 446 metric tons through the UNDP (Pilar I), have been decontaminated	As of 18 April 2017, 371 PCB-contaminated transformers were treated, adding up to a total weight of 358 tons. Out of these, 10 transformers were decommissioned, adding up to a total weight of 12 tons that have been decontaminated and recovered. Only 6 transformers corresponding to 7,14 tons have been decontaminated through the UNDP-implemented Pilar I project. This small number is due to the fact that about 1,080 tons were directly sent to TREDI in France for their elimination as a result of the delay which affected the start of the operations of the treatment plant.

Outcome 4: Project management, monitoring and evaluation

Outputs	Actual outputs delivered
Output 4.1: A Project Monitoring management structure has been developed and implemented according to GEF M&E procedures.	A Project Coordination Unit (PCU) was set up, composed of a National Coordinator and a Financial Assistant, responsible for the day-by-day operational, administrative and financial management of the project. The Project Steering Committee (PSC) was established at the launch of the project with permanent members put forward by their respective organizations through a formal procedure. A Project Management Team (PMT) within the Ministry of Environment was set up and trained to deal with the technical aspects of the PCB project as well as with M&E issues.

Outputs	Actual outputs delivered
Output 4.2: An M&E mechanism has been designed and implemented according to GEF M&E procedures.	The Inception workshop was held on 9 February 2010. A report is available for reference. APRs/PIRs for the period 2012-2016 are available for reference. A series of 4 training workshops were organized in October and November 2016 for the benefit of the representatives of the PCB National Commission, the Project Steering Committee, the National Standardization Commission and the Environmental Inspectors.[8] A visit to the treatment plant was also organized on 29 November 2016. The PSC met 6 times between February 2016 and February 2017.
Output 4.3: External evaluations have been carried out	The Mid-term evaluation was carried out at the end of 2015. The report dated January 2016 is available for reference. A project website was designed (www.popmaroc.gov.ma). Access to the website was not possible when the final evaluation took place but, according to the project coordinator, it should be fully operational by the end of April 2017. Information relating to the project can be found on the Ministry of Environment's website (www.envronnement.gov.ma). The Final evaluation was carried out in March- April 2017.

b. Achieving immediate and short-term outcomes

Outcome 1: An identification process for PCB contamination in in-service and decommissioned transformers has been set up. The PCB project Pilar II enabled the elaboration of a standardized methodology, approved by the National Commission on PCBs. The methodology was used by the Laboratory which had been selected for collecting the information and for ensuring that the national inventory on PCB transformers is kept up-to-date. The methodology was also shared with the main owners of transformers, who did use it to compile their own inventory. This methodology made it possible to better identify the park of transformers in Morocco in terms of levels of PCB concentration and to establish which ones are in service and which ones have been decommissioned. The PCB project Pilar II also provided the Laboratory with the opportunity to acquire the necessary equipment with its own funds and to make certified PCB analysis services available in Morocco which, prior to the project, had been outsourced abroad.

[8] A training workshop on the environmentally sound management of PCBs and best practice was held on 13 October 2016; a training workshop on the code for the safe use of electrical equipment containing, or contaminated by, PCBs was held on 21 October 2016; a training workshop on the monitoring and inspection of sites containing PCBs was held on 22 November 2016, and a training workshop on the monitoring of the activities of the PCB treatment plant was held on 29 November 2016.

Outcome 2: Environmentally sound maintenance and treatment of in-service PCB-contaminated mineral oil transformers in participating industries have been carried out. Thanks to building the plant to treat PCB contaminated mineral oil and electric transformers carcasses, Morocco's capacities have been enhanced. In addition, the partnership established between a foreign specialized company and a Moroccan entrepreneur has allowed the transfer of technical know-how and technology. Presently, the national company has the required technical capacities to operate in an environmentally sound manner. As concerns the expected targets in terms of quantity of mineral oil to be decontaminated, however, these were not achieved by the date of the project's completion. The final actual ratio of quantities of decontaminated mineral oil is 3% (88,6 tons over the 3000 tons planned).

Outcome 3: Environmentally sound disposal of decommissioned PCB-contaminated transformers and material recovery is set up. Similarly, as concerns the expected targets for the decontamination of transformer carcasses and their recovery, these were not achieved by the date of the project's completion. Final actual ratio is 29.5% (358 tons of transformer carcasses were decontaminated out of the 2,000 tons expected).

Outcome 4: Project management, monitoring and evaluation. Thanks to a sound project management and to the appropriate monitoring mechanisms being in place, all stakeholders involved in the PCB project were adequately and regularly informed about the progress of the project and any difficulties encountered. In addition, the stakeholders' capacity to uphold the environmentally sound management of PCBs has been strengthened and their awareness of PCB issues has been enhanced.

Taking into consideration the degree the four expected outcomes and their related outputs where achieved, and on the basis of objective as defined in the project document, the level of success of the project effectiveness is rated Moderately Satisfactory (MS). The facts would appear to indicate that, while the in-country capabilities to deal with PCB-contaminated transformers have been built, specified targets in terms of quantities of PCB-contaminated mineral oil and treated transformers are yet to be achieved in order to meet the Stockholm Convention's requirements and deadlines.

c. Likelihood of impact (achievement of intermediate states and long-term impact)

It is likely that the intermediate states and impact, as defined in the Theory of change diagram, will achieve the Satisfactory (S) rating, given that the PCB project pillar II was successful in raising the stakeholders' (including the decision-makers' awareness on PCB issues and in providing the necessary tools to address the challenge of eliminating all PCBs by 2028. In addition, there is a strong commitment of the Government to identify all financial opportunities to ensure a quick follow-up to the PCB project pillar II and satisfy to the requirements of the Stockholm Convention.

D. Efficiency

The evaluation team has carried out a review of the way in which the financial resources of the project were used and of the degree to which they were managed in a cost-effective and efficient way. It should be pointed out that this assessment is not, however, an external financial audit and cannot replace it.

The following table sets out the totality of the project's budget as had originally been foreseen in the project document over the 3 year-stretch during which the PCB project pillar II had been expected to last:

Table 5: Project's budget

Outcomes	Government	GEF	UNIDO	Co-financing (other sources)	TOTAL
Outcome 1: Identification process for PCB contamination in in-service and decommissioned transformer	36,000	217,800	-	50,000	303,800
Outcome 2: Environmentally sound maintenance and treatment of in-service PCB contaminated mineral oil transformers	49,000	1,374,300	-	2,812,000	4,235,300
Outcome 3: Environmentally sound disposal of decommissioned PCB contaminated transformers and material recovery	51,000	674,300	-	1,692,000	2,417,300
Outcome 4: Project management and M&E	116,000	171,200	50,000	-	337,200
Total	**252,000**	**2,437,600**	**50,000**	**4,554,000**	**7,293,600**

Source: Project document

According to plans, the total budget, including the contributions of both the Government and UNIDO, was estimated at 7,293,600 USD. The GEF budget, as reflected in the project document, amounted to 2,437,600USD or 33% of the total budget.

The Moroccan government had planned to provide financial resources in kind up to a sum of 252,000USD, or 3% of the overall budget. The contribution of UNIDO added up to 50,000USD, or 0.7% of the total budget, and the contribution expected from the private sector/beneficiaries, was estimated to add up to 62%.

While the Moroccan government and UNIDO did actually contribute in kind, by providing their personnel/managers and taking care of aspects of logistics, the private sector/beneficiaries' contribution pertained to the transport of contaminated electrical equipment to and from the processing unit. An average estimation by the consortium in charge of operating the facility has been pitched at around 400USD /ton.

Since the plant had treated about 450 tons of transformers by the time of the project's completion, the private sector's contribution in actual fact amounted to no more than 180,000USD.

The updated annual budgets, as approved by the PSC in the Annual Work Plans (AWPs), and the expenditure collected from the PCU and UNIDO data are as follow:

Table 6: Project's annual budgets and expenses

Year	Planned budget + revisions (USD)	Expenses (USD) Source: PCU	Expenses (USD) Source: UNIDO/PM SAP as of 20 March 2017	Delivery rate (GEF budget only)
2009	12,569	12, 569	557,141.45	100%
2010	288,000	68,076		3%
2011	248,000	149,632		6%
2012	993,000	326,865		13%
2013	1,058,000	96,379	96,379.31	9%
2014	1,650,000	1,517,905	1,517,904.93	92%
2015	112,000	81,100	81,021.45	72%
2016	183,000	92,355	92,355.13	50%
2017	92,797	52,719	59,297.86	
TOTAL		**2,397,600**	**2,404,100.13**	**98.6% as of March 2017**
Rest			33,499.87	

Sources: AWPs, UNIDO SAP

In this table, actual expenditures are compared to budgets for the purpose of determining the annual delivery rate. This rate is calculated solely for the GEF grant, other contributions being in-kind (GOV and UNIDO). As was previously observed, the private sector contribution is low (in the order of 180,000USD) which is explained by the fact that the tonnage processed falls below the Project document's target (450 tons instead of the expected 2000 tons).

Annual delivery rates for the period 2010–2013 were low, as no major operations were carried out to consume budget resources. The discrepancies between the programmed budget and the budget consumed are due to the delays which affected the procedures for the establishment of the treatment plant (the call for tender for the selection of the consortium was launched twice, the first time in June 2012, unsuccessfully, and then again in August 2013. The validation of the environmental impact assessment took time as did the granting of the treatment plant's operating authorizations from the various authorities concerned).

On the other hand, the year 2014 appears to have seen significant disbursements (1,517,904.93USD) and a 92% delivery rate, thanks to the project's budgeted activities relating to the establishment of the treatment facility (outcomes 2 and 3), which were implemented in the course of that particular fiscal year.

The remaining amount (about 1.4% of the total GEF budget) is budgeted to enable a service contract with Maroc Maintenance Environnement (MME) (the local partner of the consortium) to operate the treatment plant during the bridging period between the revised end date of the PCB project pillar II (30 March 2017), and the launch of the planned 2nd phase.

During the 2010-2017, the financial management of the PCB project pillar II benefited from the services of an Administrative and Financial Assistant. The evaluation team found the project well organized and adequately managed.

A critical point to be highlighted is the form of the management structure of the facility, which consists of a particular Public-Private Partnership where the State commits the funds of a grant provided by GEF to contract out a private enterprise in charge of developing, implementing and operating a decontamination solution for PCB equipment. The budget allocated for this investment was 1,500,000USD, 40% of which amount had been destined to establish the plant, and 60% of which had been meant for the treatment of the transformers, in accordance with the terms of the contract signed between UNIDO and TREDI (the international partner of the consortium). At the operating cost of 1,500USD per ton, which was initially retained following the downward revision of the project document's target, the consortium was expected to process 1 000 tons of transformers during the year 2016.

The findings resulting from the operation of the treatment plant for one year are as follows:

- The treatment solution implemented is reliable and efficient since all processed transformers have been tested in accordance with the international electrical specification standards for transformers (ECI60076)

- The treatment cost has been less competitive than expected due to the below-target operation of the treatment plant during that period, as a result of the insufficient supply of contaminated transformers. The fact is that PCB transformers holders should have been programming at least one year in advance the decontamination of their equipment and should have taken into account the availability of replacement devices, the processing time (15 days on average) and the time needed for carrying out the tests (which could be in excess of 10 days, depending on the workload of the laboratory).

- As a consequence, according to the consortium, the treatment cost increased, up to around 3,021USD /ton. This cost includes, in addition to the treatment cost itself (904 USD), the cost relating to the new types of oils being used, the cost of the spare parts, and the subsequent control analyses and tests. However, the actual details of the structure of the costs incurred are not available to date. The direct impact of this situation has been the decontamination of a smaller quantity of transformers and mineral oils and the temporary shutdown of the treatment plant activities.

While the project team cannot be held accountable for the constraints encountered by the PCB project Pillar II during its implementation, these constraints have affected its efficiency which is rated Moderately Satisfactory(MS).

E. Sustainability of project outcomes

a. Institutional framework and governance risks

The National Commission for PCBs, responsible for ensuring that the provisions of the Stockholm Convention on POPs and those relating to PCBs are complied with and implemented, was created by decree in 2010 by the Moroccan government.

The country prepared its NIP in 2006 and is about to update it.

The Ministry in charge of Environment has excellent human resource capacities that have been reinforced thanks to the PCB programme. The number of staff in charge of the PCB project Pillar II (despite the fact that the PMT was twice renewed) were trained on PCB issues and M&E procedures and are in possession of adequate monitoring tools.

Thanks to the communication channels established during the PCB project pillar II implementation, all stakeholders have been informed and trained on PCB issues and are aware of their responsibilities.

In respect of the regulatory framework, the existing 28-00 Law, which relates to waste management and disposal, as well as a specific decree dealing with hazardous waste management, and therefore including the management of PCB-contaminated or pure PCB decommissioned equipment, is being complemented by a new law on the management of chemical products, which will include PCB-contaminated in-service equipment.

Consequently, with an appropriate institutional and legal framework in place, the institutional sustainability of continued benefits after the end of the PCB projects is rated Likely (L).

b. Financial risks

At the time of the evaluation mission, the risk of seeing the treatment plant's operations stopped was real because of the absence of additional financing to address the cost of the treatment.

However, the Secretariat of State in charge of Sustainable Development is developing an exit strategy, based on a 2-year,2MUS dollars -second phase of the PCB project pillar II, which should start current 2017 and which is being discussed with the GEF. The aim of this new project is to keep building on the PCB elimination strategy, which consists in exporting the pure PCB transformers and in decontaminating slightly contaminated oils by means of chemical destruction. It is expected that an additional 2,046 tons of contaminated transformers will be treated and about 154 tons of highly contaminated decommissioned transformers, and 80 tons of other PCB waste, including waste from decontamination processes, will be exported. The various constraints encountered during the PCB project pillar II implementation will be addressed, including the matter of the financial mechanisms required to ensure the continuity of the phasing-out of the PCBs.

It remains likely that the cost of processing PCB-contaminated waste in the treatment facility will not be significantly lower than the cost of exporting PCB waste to European incinerators, which represents a challenge to the sustainability of the PCB management system proposed . However, both the huge mobilization of PCB holders at the end of the project and the legal measures that will be taken by the Government, means that the quantity of PCB-contaminated equipment will be larger than the quantity made available to the treatment plant at the time of the PCB project implementation. This will therefore have a positive effect in terms of the profitability and, subsequently, of the sustainability of the infrastructure.

The financial sustainability is rated "Moderately Likely" (ML)

c. Socio-political risks

Morocco enjoys a relative political stability and, despite a recent government reshuffle, the way policies are carried out will still be marked by continuity.

In addition, all concerned stakeholders (mainly the large PCB holders and members of the administration) are well aware of the PCB issue and committed to address it. However, the concerned SMEs and the informal sector were not targeted during the PCB project Pillar II

The socio-political sustainability is rated "Likely" (L).

d. Environmental risks

Environmental sustainability is linked to the other three dimensions. Risks potentially affecting the environment (contamination of soils and waters in particular) were minimized thanks to the various stakeholders' heightened awareness and to their having been made alert to the problems of PCBs and the availability of national technical capacities and infrastructures.

However, the sustainability of the benefits already achieved by the PCB project Pillar II will only be ensured if an appropriate regulatory framework is enforced and support is made available to SMEs/SMIs which represent about 40% of PCB holders.

The environmental sustainability is rated Moderately Likely (ML)

The overall rating for sustainability is therefore rated "Moderately Likely" (ML).

F. Assessment of monitoring and evaluation systems

An indicative Monitoring and Evaluation plan and its corresponding budget were developed during the design phase. M&E Activities were listed along with the parties in positions of responsibility and the corresponding timeframes.

All M&E activities have been implemented in line with the project document and GEF M&E procedures:

- Setting-up the Project Coordination Unit (PCU) which includes a National Project Coordinator and a Financial Assistant, in charge of the daily management of the project.
- Setting up the Project Steering Committee (PSC) which is composed of representatives of various Ministries and of large PCB holder companies who meet annually.

In addition, another Project Committee within the Ministry of Environment (the Project Management Team) was also created for the follow-up and the monitoring of the quality of the services provided to the project, during its implementation and following its completion. The PMT includes the National Project Director and several branches of the Ministry of Environment involved in the PCB project as well as the PCU. This committee meets every quarter.

In terms of M&E tools, the project document clearly mentions all the steps and meetings for the M&E as well as the reports to be produced. Thus,

- The Inception workshop took place on 2 February 2010
- The mid-term evaluation was conducted at the end of 2015
- The final evaluation was conducted during March and April 2017
- Annual Work Plans were prepared for every year of the project's implementation (2010-2017) and approved by the PSC
- Project Implementation Reviews (PIRs) were annually prepared for the period 2012 to 2016.
- Tripartite (UNDP, UNIDO, Ministry of Environment) meetings were regularly held
- No information was available with respect to the financial audit of the PCB project Pillar II
- All documents produced were distributed/shared with the members of the different committees
- A specific website on PCBs was developed but was not accessible at the time of the final evaluation mission.

The evaluation team noticed that the project's progress had been kept track of in an appropriate and timely manner thanks to information meetings documented by minutes, Power point presentations, Excel tables on the update of the PCB transformers' inventory and the following-up of the monthly decontaminated volumes of transformers and oils. Internal procedures have been set up for the review and approval of all the deliverables produced.

Impact indicators (as defined in table 6, section F in the PRODOC) were also annually documented and reported to the PSC.

The PCU had shown an excellent reactive and adaptive management style to cope with the difficulties/constraints encountered during the project's implementation.

To mention but a few examples of evidence of successful adaptive management: facilitating the administrative issues; persistently promoting the project and advocating its benefits; sensitizing the stakeholders; making constructive decisions jointly with the PMT, such as deciding that there would be only one single plant, instead of two as had originally been planned, in charge of treating and dismantling the transformers; deciding that the opening of the tenders for the installation of the treatment plant would be relocated at the UNIDO Office in Morocco, in order to expedite the bidding approval process; deciding that, given the delays encountered in operating the treatment plant, the Pillar I decommissioned PCB-contaminated transformers that were supposed to be conditioned through the treatment plant would be sent to France directly for disposal; revising the quantity targets of contaminated transformers and oils to be treated and the unit cost of treatment in order to limit the risks of the project suffering delays and in order to keep to the allocated budget.

The view of the evaluation team and those of some of the PSC members themselves is that the PSC does not appear to have fully played its role in terms of the strategic guidance they had been supposed to offer the project. They had without any doubt, been regularly informed on the progress of the project, had approved the annual work plans and changes proposed by the Coordinator and the Ministry of Environment committee. However, there are no indications that they had pondered on strategic matters. They rather discussed the particular issues facing large PCB holders. In addition, with different participants turning up from one meeting to the next, much time was wasted with the need to update new comers who had not been briefed by those colleagues who had attended prior meetings.

The Monitoring and Evaluation systems are rated "Satisfactory" (S).

Follow-up on the recommendations of the mid-term evaluation:

Table 7: Follow-up on the MTE's recommendations

Recommandations	Responsables	Échéances (indicatif)	Follow-up
1− Renforcer le plaidoyer en vue d'impliquer les détenteurs dans l'utilisation de la plateforme.	DPR, Coordonnatrice,	Avant la clôture du projet	Done. As a result, an influx of requests by large PCB holders led to an extension of the project 's duration until March 2017.
2− Mettre en place une plateforme collaborative d'échange des expériences au profit des détenteurs ayant bénéficié du projet et les autres qui en manifestent l'intérêt.	DPR, ONUDI, Coordonnatrice	Avant la clôture du projet	Not yet. The collaborative platform was supposed to be developed through the projects' website. Actually, this exchange occurred during the PSC meetings.
3− Maintenir les actions de sensibilisation des parties prenantes du projet	DPR, ONUDI, Consortium, Coordonnatrice	1 action par trimestre ou semestre	Done.
4− Actualiser périodiquement l'inventaire des appareils à PCB et des volumes d'huiles contaminées.	DPR, Consortium,	1 action par semester	Inventory is updated as the National Project Coordinator receives information. Not yet institutionalized.
5− Assurer le suivi du fonctionnement de la plateforme.	1- Pendant la durée du projet : Coordonnatrice, ONUDI, DPR, Consortium 2-après la clôture du projet : consortium, DPR	Mensuel, basé sur les recommandations du rapport ''*mécanisme de suivi et d'évaluation de la mise en œuvre du programme*'', 2011	Done. In addition, the project committee within the ME has been trained on M&E tools to take on the monitoring of the treatment plant, done presently by the PMU, after the project's completion.
6- Élaborer et mettre en œuvre la réglementation pour le traitement des appareils en service contaminés aux PCB.	DPR, DRC, ONUDI, Coordonnatrice	Avant la clôture du projet	The Law on the management of chemical products drafted but still under discussion. Two Moroccan standards prepared but not yet enforced.
7− Élaborer un contrat d'engagement de l'exploitant sur la période post-projet jusqu'à l'atteinte des objectifs du MDE.	DPR, Coordinatrice, ONUDI, Consortium	Avant la clôture du projet	Not done yet. ME is negotiating with the GEF a phase II of the project. The Consortium is reluctant to sign a new commitment in the absence of an enforced appropriate regulatory framework.

Recommandations	Responsables	Échéances (indicatif)	Follow-up
8− Élaborer un plan d'action avec des objectifs annuels chiffrés de traitement des appareils et huiles contaminées aux PCB.	DPR, Consortium, Coordonnatrice	Mars 2016	Quarterly meetings are organized with TREDI to assess progress made and forecast the quantities of transformers to be processed.
9− Assurer la formation des membres de l'Équipe de Gestion du projet sur les outils de suivi & évaluation.	DPR, Coordonnatrice	Février - Mars 2016	Training was conducted on October- November 2016
10- Intégrer dans l'UGP toutes les divisions de la DPR ainsi que la Direction de la réglementation	DPR, Coordonnatrice	Février 2016	The enlarged Project Management Team was created in February 2016
11−Assurer la tenue des réunions du CPP.	DPR, Coordonnatrice	Réunions semestrielles et annuelles	Annual meetings are conducted.
12−Assurer la diffusion des rapports annuels.	Coordonnatrice DPR, consortium	Mars 2016	Paper versions are distributed. Electronic versions will be available through the website when it will be operational.
13−Activer et mettre à jour le site web du projet.	DPR, DPCC Coordonnatrice	Février 2016	Web site designed but not operational yet.
14− Assurer la diffusion périodique des tonnages et volumes traités ainsi que des prix de traitement et de transport.	Coordonnatrice, Consortium DPR,	À partir de février 2016	Treatment prices have been transmitted to large PCB holders. A detailed table on volumes and quantities of transformers and oils decontaminated is under preparation and will be distributed to each large PCB holder.
15− Élaborer une stratégie de sortie du projet qui permettra d'assoir la durabilité du projet en tenant compte de l'organisation de la DPR, de la stratégie du MDE pour la gestion et l'élimination des déchets dangereux et du budget alloué à ces activités.	DPR, Coordonnatrice ONUDI,	A partir de mai 2016	NIP will be updated thanks to funds mobilized through UNEP. An action plan for the disposal of PCBs is under discussion at the NC-PCB. Funds need to be mobilized. GEF MSP Phase 2 of the PCB project is under finalization.

G. Monitoring of long-term changes

The PCB project Pillar II helped to set up a monitoring system for the project 's activities and performance. Sustainability of this system is ensured by the setting up of the PMT within the Ministry of the Environment which is expected to take over the follow-up, at the end of the project. In addition, all the members of the PMT have been trained on M & E approach and tools. A regular monitoring is carried out by the Project Coordinator, who as a relay, transmits the relevant information (such as a regularly updated national inventory of contaminated transformers, the monthly quantities of processors and oil treated, etc.) to all the stakeholders. However, the rotation of the members of the PMT has affected its effectiveness the PCB project pillar II was able to train all of the new members as well. The anchoring of the PMT within the Ministry of Environment is a strong point to highlight.

H. Assessment of processes affecting achievement of project results

In this section, the evaluation team has considered a number of issues that have positively or negatively affected the project's implementation and the achievement of its results.

a. Preparation and readiness/quality at entry

As already seen in the design analysis, the project's objectives and components were clearly stated and defined. However, the design had not allocated a sufficient amount of time to cover the administrative needs of the project, such as the launch of the tenders, the official approval of the Environmental Impact Study, the time needed for the contractual process with the retained consortium, the time elapsed between the feasibility studies carried out during the project preparatory phase and the actual start of the project which would have required their update, etc.

Also, the capacities of the beneficiaries were not sufficiently appreciated to their full value in every case: for instance, the cost of the transportation of transformers to the treatment plant, which the major PCB holders had to take on, has had an impact on their participation and, as a consequence, on the number of decontaminated transformers. Similarly, the participation of small companies was nil due to the fact that there was no equipment available in reserve to replace the transformers they had sent to the treatment plant for decontamination.

Last but not least, the lack of binding measures which would oblige the PCB holders to ensure the regular maintenance of their equipment has generated additional costs that were not originally foreseen, linked to the obligation to renew the mineral oils and to carrying out reinforced electrical tests.

b. Country ownership/drivenness

The PCB project Pillar II was perfectly aligned to the national priorities of Morocco. The country has ratified the Stockholm Convention on POPS and has included the PCB issue as a main priority into its National Implementation Plan. Progress has been made with the adaptation of the regulatory and institutional framework[9] and strong awareness-raising efforts have been made in respect of PCB issues across the various ministerial departments. In addition, the Government is strongly committed to pursuing these initial efforts. It is mobilizing additional financial resources for a second phase of the project and addressing constraints identified during the PCB project Pillar II.

[9] A series of laws have been enacted: Law 11-3 relating to the national policy for environment protection; Law 99-12 relating to the National Charter on Environment and Sustainable Development, Law 13-3 on air pollution; Law 28-00 on waste management and disposal; Law 10-95 on water; Law 13-89 on external trade; Law 65-99 on the labor code; Law 24-09 on products and services safety; Law 12-03 on Environmental Impact Assessment; Law 30-05 relating to the road transportation of hazardous merchandise and the March 2016 draft law on chemical products management and control.

c. Financial planning

The financial management of the project is ensured by UNIDO at Headquarters, and through the SAP. The Project Coordinator also keeps track of the budget and regularly reports to the PSC on all expenses made or activities included in the budget.

The co-financing that was pledged (by the Government of Morocco and UNIDO) has materialized. However, the actual contribution of the large PCB holders and other private sector project beneficiaries was difficult to track. It is very likely that it is below the amount announced in the Prodoc, since their level of participation was lower than expected and for most of them they just had to bear the transportation cost of their transformers to the treatment plant.

d. UNIDO's supervision and backstopping

In accordance to the Memorandum of Understanding signed between UNIDO and the Government of Morocco on 21 June 2011, the organization was responsible for a number of tasks in the implementation of the PCB Pillar II project.

As regards project management, UNIDO was a member of the PSC and has therefore monitored the progress of the project activities on the basis of the reports produced by the PMT and has also participated in the validation meetings of the deliverables. This involvement has allowed UNIDO to take an operational and technical overview, as well as control over the achievements, the quality of these achievements, and to have a say in respect of the adjustments needing to be made.

In addition, UNIDO has been particularly active in addressing the treatment plant's operational issues raised by the Consortium in September 2016 in order to unlock the situation and identify viable and sustainable solutions.

On another level, UNIDO was responsible for the approval of the terms of reference, the launch of the calls for tenders, the establishment of contracts as well as the payment of the goods and services procured under the project, thus ensuring the traceability of the funds used and transparency in their management. However, the centralization of the administrative and financial management at the Vienna HQ has somewhat impacted the time required to carry out certain activities, time that was not taken into account in the initial project timeline.

Last but not least, the involvement of the UNIDO Office in Morocco and the responsiveness of its resource personnel, in particular their role as coordinators at the national level, was acknowledged by the number of stakeholders that were met.

e. Co-financing and project outcomes and sustainability

Co-financing from the project beneficiaries such as the large PCB equipment holders, although difficult to estimate, has not been as high as had been expected and this did generate some difficulties.

Indeed, the insufficient ability to anticipate and the cumbersome decision-making process by large PCB equipment holders, in particular with regard to supporting the cost of transporting the contaminated transformers to the treatment plan and the purchase in some cases of alternative transformers, led to their taking part in the project with a delay. This has had an impact on the operating and achievements of the facility, and on its profitability.

The refusal of large PCB holders to leave the transformers which have been declared out of service at the treatment plant has impacted the treatment cost which consequently increased.

In fact, the recycling and the selling of the copper and metal fraction would have reduced the treatment cost. This was accounted for in the initial assessment of the treatment price in the feasibility study and the financial offer made by the Consortium.

f. Implementation approach

The implementation approach chosen by UNIDO was the one the organization uses for its other projects. It promoted local ownership and capacity building. However, given the nature of the PCB project Pillar II which was a technical challenge requiring a slightly different management approach, the technical support provided by UNIDO could have been more intense and closer to the PCU, due to some significant risks encountered during the project's implementation and that were not previously identified.

I. Project coordination and management

From the time of its very design, the PCB Pillar II project has made sure that all stakeholders[10] likely to be interested in the project would be involved. Section A4 of the project document describes the involvement and role of every one of these stakeholders.

At the strategic level, institutional stakeholders have in fact been involved with establishing the National Commission on PCBs (PCB-NC) to support and strengthen the implementation of the legal framework for the management and disposal of PCBs in Morocco.

In terms of decision-making, PCB-NC permanent and alternate members, as well as representatives of the UNDP and UNIDO implementing agencies, were involved in the establishment of the Project Steering Committee (PSC). However, the PSC did not provide the project with strategic support, which function was mainly the responsibility of the PMT. Main strategic decisions taken during the project's implementation were discussed and proposed by the PMT and UNIDO to the PSC. In addition, since the PSC was constituted from representatives of the large PCB holders involved in the project, the meetings were mainly, and often, an opportunity to discuss the operational difficulties which every one of them encountered. On the other hand, it is important to highlight the sustained involvement of the Ministry of the Interior, who enabled the mobilization of organizations (the electricity boards) under its supervision.

At the operational level, project activities have involved the majority of stakeholders through awareness, information and communication sessions, as well as technical training on the safe management of PCBs and the replacement and environmentally sound disposal of PCBs. It should be borne in mind, however, that SMEs / SMIs have not taken part on a massive scale and that the informal sector could not be included in the consultation process due to the difficulty of reaching the target group which it represents.

At the GEF level, UNIDO acted as the implementing agency for the PCB Pillar II project. Management responsibilities for the entire project were delegated to a Project Management Unit (PMU) established within the Directorate for Programs and Achievements of the Delegated Ministry of Environment (DME), and a National Project Coordinator (NPC) was recruited for the daily management of the project.

The project activities were carried out by the PMT within the Ministry of Environment. In December 2014, the NCP, who had started with the project in 2010, left and was replaced by the Head of the Prevention and Intervention Strategy Division, who had been the deputy director. This change of NPC

[10] Delegate Ministry for the Environment, Ministry of Industry, Ministry of Interior, Ministry of Health, Department of Energy, Office Chérifien des Phosphates (OCP), Office National de l'Eau Potable (ONEP), Office National de l'Electricité (ONE), Private electricity distribution companies (LYDEC, REDAL, AMENDIS…), Confédération Générale des Entreprises du Maroc (CGEM), Major public PCB equipment holders, Elimination and PCB treatment companies, Services providers (elimination, collection and transportation of dangerous waste), laboratories.

was accompanied by changes within the Directorate for Programs and Achievements as a result of the new organization chart being applied. Thus, besides the head of the Division, the two Executive officers from this directorate, who constituted the PMT, were transferred and replaced. It will also be recalled that the UNIDO focal point was also replaced in the course of 2012. The Deputy Director within the PMT was changed a second time in the course of 2016.

These changes within the PMT, which have affected the running of the human resources department, have had an impact on the project monitoring because every change that took place caused delays and affected efficiency since the new resources had to receive training and brought up-to-date about the project and its progress before they could become fully operational. In spite of the delays caused by all these changes, the continuity of the project was successfully ensured and the PMT kept managing the project activities with efficiency. The work plans and the periodic activity reports prepared and submitted to UNIDO make this clear. Moreover, following the recommendation of the MTE, the PMT was enlarged to other departments of the Secretariat of State which has had a positive impact on the follow-up of the treatment plant's activities.

Table 8. Quality of project implementation performance

Evaluation criteria	Rating
1. Ownership and relevance	HS
2. Effectiveness	MS
3. Efficiency	MS
4. Impact	S
5. Likelihood of risks to sustainability	ML[11]
6. Project coordination and management	S
7. M&E	S

J. Gender mainstreaming

For the sake of clarity, the position of the PCB project Pillar II in respect of gender issues must be set in the appropriate context in respect of the guidance in terms of policies at the time of its designed.

In all fairness, the PCB project pillar II was designed prior to the issuance in April 2009 of the UNIDO policy on Gender equality and the empowerment of women and of its addendum in May 2010. In addition, a non-negligible consideration is that, given its nature, the project not fall into the category of projects where promotion of gender equality is one of the key aspects.

As a consequence, gender concerns were not given the consideration they would have otherwise received in the project document or during the project's implementation.

Gender related information is also absent from all reports that have been prepared (progress reports, PIRs) with the exception of a single report on training sessions that were organized within the PCB project Pillar II and for which the consultant[12] presented attendance percentage figures for each training session disaggregated according to the sex of the participants.

[11] Overall rating for sustainability cannot be higher than the rating of the dimension with lowest ratings. Since two dimensions of the sustainability (the financial sustainability and the Environmental sustainability) have been rated ML, this implies that the overall rating for sustainability is rated ML.

[12] « Rapport final sur le déroulement des formations sur la gestion écologiquement rationnelle des PCB », Youssef Bennouna, 2016

Table 9: Overall ratings

Criterion	Evaluator's rating
Attainment of project objectives and results	
Project implementation	MS
• Effectiveness	MS
• Relevance	HS
• Efficiency	MS
Sustainability of Project Outcomes	ML
• Institutional framework and governance risks	L
• Financial risks	ML
• Sociopolitical risks	L
• Environmental risks	ML
Monitoring and Evaluation	HS
• M&E design	S
• M&E Plan implementation (use for adaptive management)	HS
• Budgeting and Funding for M&E activities	S
Project Formulation	S
• LFA	S
Project Design	
• Project design	S
Project Management	S
• Implementation approach	S
• UNIDO supervision and backstopping	S
OVERALL PROJECT RATING	S

V. Conclusions, recommendations and lessons learned

This chapter is divided into three sections:

A. Conclusions
• The in-country capacity of Morocco has been increased in terms of knowledge and awareness related to the PCB issue and in terms of the availability of local technical expertise and infrastructures, however the PCB project Pillar II has not achieved its expected targets in terms of the pre-defined volume of PCB contaminated mineral oil and PCB contaminated metals to be treated.
• The country benefits from a state-of-the-art treatment plant which operates along international standards.
• The Moroccan government and the majority of large PCB holders are strongly committed to addressing the issue of PCB-contaminated in-service and decommissioned transformers.
• Some shortcomings in the design of the project, such as the lack of a detailed characterization of the inventory of the transformers (by age, by state), the too low estimation of the unit cost of the treatment, the focus on public and semi-public holders as well as on some large private companies, have had an impact on the achievements of the project's objective targets.
• The absence of a coercive law to ensure the environmentally sound management of in-service equipment contaminated with PCBs, and the weak enforcement of the law on waste management and disposal of decommissioned PCB-contaminated transformers, have led to the absence of motivation of PCB holders to hand over their contaminated equipment to the treatment plant. This has had an impact on the plant's activity and consequently on its profitability.
• The PCB project Pillar II was successful in terms of awareness-raising regarding the risks posed and the dangers stemming from PCBs to be found among large PCB holders, electricity distribution companies and the Government. However, the small and medium PCB holders which were holding a figure of at least 40% or so of the park of transformers were not sufficiently targeted and neither was the informal sector (metal scrap dealers)
• The overall efficiency of the project was affected by the delays to which it had been exposed (the project ran 6,5 years instead of the 3 years originally planned). It was also affected by the insufficient cost-effectiveness of outcomes 2 and 3, for which the totality of their budgets was disbursed for results that were below expectations).
• The Project Steering Committee, which included inter-ministerial representatives but mainly large PCB holders, did not effectively provide the project team with the necessary strategic guidance.
• It is likely that the project's benefits will be sustained, but this sustainability is highly dependent on the uninterrupted operation of the treatment plant, on the tightening of the legal and regulatory framework and its enforcement, and on the involvement of the private sector, which had not been sufficiently targeted when the first phase of the project had been underway.
• With the PCB project Pillar II being a demonstration project, it made it possible to draw lessons for future phases and/or other similar initiatives.

B. Recommendations

The Government should consider:

- completing and enforcing the legal framework relating to in-service and decommissioned PCB-contaminated transformers and PCB waste (finalizing and adopting the new law on chemical products which will relate to in-service PCB-contaminated transformers)
- Providing the required resources and means to the Environment Inspectors to enable them to enforce the law
- Mobilizing short-term additional financing to ensure the functioning of the treatment plant
- Building on lessons learnt from the PCB project Pillar II so that the feasibility studies might be updated, financial incentives and/or technical support to small and medium PCB holders might be put in place and the issue of the involvement of the informal sector might be addressed
- Keeping up the information and awareness-raising campaign targeting main stakeholders but also including the private sector and the population
- Reinforcing and institutionalizing the monitoring system put in place during the implementation of the PCB project Pillar II
- Launching a financial audit in order to determine the cost structure of the treatment process

UNIDO should consider:

- Streamlining the bureaucratic processes in order to avoid delays (the signature of the convention with the country concerned, the preparation of TORs, the reviewing of the financial aspects of tender results, etc.)
- Introducing more delegation procedures in the area of the financial management of the project, and supporting this with appropriate monitoring tools.
- Building on the lessons learnt from this project to develop other similar initiatives
- Encouraging south-south cooperation between countries in the same geographical region and finding themselves in a similar situation (knowledge and technology transfers).
- GEF should consider:
- Given the time which elapsed between the preparatory phase (2007-2008) and the effective start of the project (2010), that the updating of feasibility studies for such types of projects should take place before the launch of a tender (2014) so that the evolution of the context might be taken into account.
- Speedy processing for the second phase of this project in order to take on board the positive dynamics generated by the PCB project Pillar II and to eschew the risk of the treatment plant closing down due to a lack of activity.

C. Lessons learned

The lessons that were learned from the PCB project Pillar II, and which similar future projects might consider are:

• The fact that the PCB Pillar II project's implementing agency had been designated from within the Ministry in charge of the environment and. in particular, from within the Directorate responsible for the implementation of the Ministry's management and disposal policy of hazardous waste, has allowed a strong institutional anchoring of the project and facilitated its ownership.
• The involvement of all potential target groups in both the preparation and the implementation of the project, and carrying out an assessment of the needs of these target groups, are two aspects of the process which are critically important if a successful mainstreaming of the environmentally sound management of PCB equipment into their activities/policy is to be achieved. This involvement requires that the project team establishes a climate of communication and of training at all levels on the objectives of the project, its conceptual framework and approach[13]. Such elements would bring to the planning of the holders an appreciable degree of innovations, and would bring new knowledge to some of the institutions involved (Health, Customs, etc.), helping them to have full ownership of the project from its early stages.
• Mutual support and synergy with other development partners working on identical themes in the field of capacity building and hazardous waste management would help catalyze the actions of the project. Ideally, this could be done through active participation in the improvement process of the methodological tools; through supporting the dissemination and use of these tools to reach local actors as far and wide as possible; by avoiding the redundant and repetitiveness of similar actions with the same beneficiaries.
• The availability of evidence-based data provides the arguments necessary to press on with developing the legal and regulatory framework and the management of hazardous waste. As was done by the PCB project pillar II, an inventory of PCB devices was drawn and the necessary tools for decision-making were developed (mapping PCB equipment and waste sites and potentially contaminated sites).
• The evolution of the national context in which the project is taking place must be taken into account throughout the different phases of the project. This should lead to integrating pointers into the logical framework of the project, with positive effects and a significant impact on the project results.
• The commissioning of the treatment plant made it possible to put to the test and industrial management model for the treatment of PCB-contaminated equipment and for the disposal of pure PCB transformers. This model could be replicated in countries with a similar economic set up. Technical and managerial knowledge could be shared between countries with a similar linguistic background. It could also be shared between all African countries in the context of South-South cooperation initiatives. Such patterns of knowledge sharing could also be extended to the countries of Eastern Europe and South America.

[13] The guide on best practice for a secure management of the PCBs (Arabic and French versions); the interactive training CD for all relevant stakeholders, including all information on life cycle management of PCBs; a study on the price of transformers and financial mechanisms to encourage owners to replace their PCB equipment; training modules on POP/ PCB to be integrated into the curricula of specialized Master degrees.

• The exploitation of the treatment plant made it possible for Morocco to set up a pricing code per ton of contaminated oil and / or per ton of contaminated equipment. This price code could serve as a reference for the development of similar projects in the region, in countries with a similar economic set up or across the African continent.
• The PCB project Pillar II could be taken as an ideal case-study to demonstrate how a holistic approach to PCB management could be taken. It combines both the will to keep the preliminary PCB inventories updated, and the will to keep PCB releases at the lowest possible levels while pressing on with disposal.

Annex 1: Terms of reference

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

Terms of Reference

Independent Terminal Evaluation of the UNIDO Project:

SAFE PCB MANAGEMENT PROGRAMME IN MOROCCO, PILLAR II
ENVIRONMENTALLY SOUND MANAGEMENT AND DISPOSAL OF PCB-CONTAMINATED TRANSFORMERS IN MOROCCO

UNIDO Project number: GF/MOR/09/002
UNIDO project ID: 104051
GEF Project ID: 3883

NOVEMBER 2016

Project Background and Overview

Project Factsheet

Project Title	Safe PCB Management Programme in Morocco, Pillar II
GEF project ID	3883
UNIDO project No.	104051
Country(ies)	Morocco
GEF Focal Area and Operational Program	Chemical and Wastes - Persistent Organic Pollutants
GEF Agencies (Implementing Agency)	UNIDO
Project Executing Partner	Directorate for Environmental Monitoring and Prevention of Environmental Risks (DSPR) of MEMEE
Project Implementation Start Date	July 2010
Project Duration (Months)	77
GEF Grant (USD)	2,437,600
UNIDO Agency Fee (USD)	243,760
UNIDO Inputs (USD)	50,000
Counterpart Inputs - Co-financing (USD) at CEO Endorsement	4,856,000

Source: Project Document

Project Summary

The management and the ecologically rational elimination of PCB appear among the priority actions established in the NIP. In this context, Morocco, through the Ministry of Environment, requested the financial support of the Global Environment Facility (GEF) for the implementation of a national program of management and elimination of the PCB, in association with the United Nations Organization for the Industrial Development (UNIDO) and the United Nations Development Programme (UNDP).

The program, initially planned for the duration of three years (2010-2012) and then extended to December 2016, aims at implementing a regulatory framework of management of the national PCB, the capacity building regarding ecologically rational management of the PCB and the secure elimination of the set of devices to pure PCB and those which are contaminated inventoried at the national level. The program is executed within the Directorate for Environmental Monitoring and Prevention of Environmental Risks (DSPR) of the Ministry of Energy, Mines, Water and Environment (MEMEE) under the Ministry of Environment (MDE).

The program consists of two pillars simultaneously implemented with the technical assistance of two United Nations agencies, UNDP for Pillar I and UNIDO for the Pillar II. The table below summarizes the components covered by each of 2 pillars, where Pillar II only is covered by this Terminal Evaluation.

Table 1:

	Pillar II (UNIDO)	Pillar I (UNDP)
Outcome 1	Establishment of the process of identification of transformers of the mineral oil contaminated by the PCB	Strengthening of the legal, political and administrative framework of management and disposal of the PCB
Outcome 2	Implementation of a local infrastructure of dismantling of transformers and decontamination of oil and metals	Building of national capacities regarding secure management of the PCB and the identification of new sources of PCB
Outcome 3	Strengthen the Administration's capacity regarding surveillance and reporting of pollution created by the PCB	Ecologically rational replacement and disposal of pure-PCB devices with the aim of their ecologically-rational elimination

Funded with US$ 2,437,600 by GEF, the project also benefited from additional US$ 4,856,000 from counterpart's inputs, mainly from Private sector and Government, for a total budget of US$ 7,537,360 (inclusive of the support costs).

Project Objective

The overall objective is to assist Morocco to effectively and efficiently implement the Stockholm Convention by strengthening its capacities for the sound management and disposal of PCB-contaminated electrical equipment.

Project activities mainly target the following groups:

The public and private holders of PCB: ONE, OCP, ONCF, ONEP, SNRT, ONDA, military bases, electricity-supplier's private companies (LYDEC, REDAL, AMENDIS), local electricity suppliers, etc.;

PCB operators: companies processing and eliminating PCB, companies maintaining the transformers, service companies specialized in the management and the disposal of PCB, the analysis laboratories, etc.;

Local administrations: customs, royal police, civil protection, local authorities, the external services of ministries in charge of control of hygiene, health and the environment;

Universities and the State Secretariat in charge of the school education: they are targeted for the integration of the modules of PCB secure management within the university curricula;

Civil society (local associations, ONG, CGEM): these work in the domains of health and environment at the local level in all the Moroccan territory and they have to communicate and to inform about the PCB issue.

The project consists of the following 4 Outcomes:

Outcome 1: Identification process set up for PCB contamination in in-service and decommissioned transformers.

Outcome 2: Environmentally sound maintenance and treatment of PCB contaminated mineral oil transformers in participating industries set up.

Outcome 3: Environmentally sound disposal of decommissioned PCB contaminated transformers and material recovery set up.

Outcome 4: Project management, monitoring and evaluation (M&E).

Project Implementation Arrangements

UNIDO, thanks to its comparative advantage in the area of environmentally sound management and disposal of PCB-contaminated electrical equipment acted as the GEF Executing Agency (EA) for the project. UNIDO assisted the National Executing Agency (NEA) in the execution of the project through the provision of timely assistance at key phases of project implementation, in the review of investigations and reports prepared as outcomes to the project, in the disbursement of funds necessary for the recruitment of international experts and other related international expenditures and in guiding the NEA to fulfil its obligations under the Stockholm Convention.

Program Coordination Unit (PCU): consists of the national coordinator and an administrative and financial assistant. The Unit is responsible for the day-by-day operational, administrative and financial management of the program and the production of expected results, according to the project document. The Unit assures the effective implementation of the program and identifies the actions to be undertaken by assigning it, in an optimal way, the human and financial resources.

Project Management Team (PMT): assures the follow-up of the program activities' implementation. It analyzes and approves the ToR of the services delivered, the researches and the activities within the framework of the implementation of the Program. Furthermore, PMT assures the follow-up and monitors the quality of the services provided and the contribution of the consultants involved. The PMT manages all national activities of the project including the recruitment and supervision of national experts The PMT consists of the national Director of the program, the branches of the MDE involved and the Coordination Unit.

Project steering committee (PSC): consists of the State Secretariat for Water and Environment (SSWE) representing MEMEE/DSPR, representatives of the companies that form the consortium, and UNIDO. An independent company from the analytical sector will be in charge of continuous monitoring of compliance with international environmental standards and possible releases of POPs.

PCB Committee: established by decree n°2-08-243 of 30 rabii I 1431 (in March 17th, 2010). Under the umbrella of the DPR / MDE, the committee's mandate is to monitor the implementation of the capacities of the Stockholm Convention on Persistent Organic Pollutants (POP) and particularly over those relative to the PCB. The Committee meets periodically and at least twice a year and assures, among the others, the follow-up of the implementation of the activities of the PCB program, in particular the one related to the approval of the regulatory framework.

The Committee is constituted by the representatives of 1) the different Ministerial Departments involved (Industry, Finance, Water, Energy, Mines, Agriculture, Interior Ministry, Equipment, Transports, Health, Commerce, National defense and the General Secretariat of the Government); 2) independent local service providers and public service distributors of water and electricity and; 3) the National Office of Electricity and Drinking Water (ONEE), Electricity and Water departments.

Budget Information

Overall cost and financing (including co-financing):

Project Components/Outcomes	Baseline	Co-financing ($)	GEF ($)	Total ($)
Outcome 1: Identification process for PCB contamination in in-service and decommissioned transformer set up	36,000	50,000	217,800	303,800
Outcome 2: Environmentally sound maintenance and treatment of PCB contaminated mineral oil transformers in participating industries carried out	49,000	2,812,000	1,374,300	4,235,300
Outcome 3: Environmentally sound disposal of decommissioned PCB contaminated transformers and material reclamation set up	51,000	1,692,000	674,300	2,417,300
Outcome 4: Monitoring and evaluation (M&E) Project management	116,000	50,000	171,200	337,200
Total	252,000	4,604,000	2,437,600	7,293,600

Source: Project Document

UNIDO budget execution (GEF funding excluding agency support cost):

				Released Budget	Expenditure	Funds Available
Year	Sponsored Program	Sponsored Class		USD	USD	USD
2012	104051-1-01-01	1100	Staff & Intern. Consultants	19,735.58	19,735.58	0.00
		1700	Nat. Consult./Staff	237,560.52	237,560.52	0.00
		2100	Contractual Services	52,329.04	52,329.04	0.00
		3500	International Meetings	11,201.47	11,201.47	0.00
		4500	Equipment	7,177.52	7,177.52	0.00
		5100	Other Direct Costs	26,665.48	26,665.48	0.00
		Result		354,669.61	354,669.61	0.00
	104051-1-02-01	2100	Contractual Services	201,744.00	201,744.00	0.00
		Result		201,744.00	201,744.00	0.00
	104051-1-02-02	5100	Other Direct Costs	728.15	728.15	0.00
		Result		728.15	728.15	0.00
	104051-1-05-03	1700	Nat. Consult./Staff	-0.31	-0.31	0.00
		Result		-0.31	-0.31	0.00
2013	104051-1-01-01	1100	Staff & Intern. Consultants	-1,416.45	-1,416.45	0.00
		1700	Nat. Consult./Staff	71,961.04	71,961.04	0.00
		3500	International Meetings	0.00		0.00
		4500	Equipment	-877.07	-877.07	0.00
		5100	Other Direct Costs	-250.98	-250.98	0.00
		Result		69,416.54	69,416.54	0.00
	104051-1-02-01	2100	Contractual Services		0.00	0.00
		Result			0.00	0.00

				Released Budget	Expenditure	Funds Available
	104051-1-02-02	5100	Other Direct Costs	-6.99	-6.99	0.00
		Result		-6.99	-6.99	0.00
	104051-1-03-02	1100	Staff & Intern. Consultants	0.00		0.00
		2100	Contractual Services	0.00		0.00
		Result		0.00		0.00
	104051-1-04-02	2100	Contractual Services	0.00		0.00
		Result		0.00		0.00
	104051-1-05-01	1100	Staff & Intern. Consultants	0.00		0.00
		1500	Local travel	9,692.06	9,692.06	0.00
		1700	Nat. Consult./Staff	16,980.51	16,980.51	0.00
		3500	International Meetings	0.00		0.00
		4500	Equipment	0.00		0.00
		5100	Other Direct Costs	297.19	297.19	0.00
		Result		26,969.76	26,969.76	0.00
	104051-1-05-03	1100	Staff & Intern. Consultants	0.00		0.00
		1700	Nat.Consult./Staff	0.00		0.00
		Result		0.00		0.00
2014	104051-1-01-01	1100	Staff & Intern. Consultants	0.00		0.00
		1700	Nat. Consult./Staff	0.00		0.00
		3500	International Meetings	0.00		0.00
		4500	Equipment	201.13	201.13	0.00
		5100	Other Direct Costs	-549.51	-549.51	0.00
		Result		-348.38	-348.38	0.00
	104051-1-02-01	2100	Contractual Services		0.00	0.00
		5100	Other Direct Costs		0.00	0.00
		Result			0.00	0.00
	104051-1-02-02	5100	Other Direct Costs	0.00		0.00
		Result		0.00		0.00
	104051-1-03-02	1100	Staff & Intern. Consultants	0.00		0.00
		2100	Contractual Services	990,000.00	990,000.00	0.00
		5100	Other Direct Costs		0.00	0.00
		Result		990,000.00	990,000.00	0.00
	104051-1-04-02	2100	Contractual Services	511,831.00	511,831.00	0.00
		5100	Other Direct Costs		0.00	0.00
		Result		511,831.00	511,831.00	0.00
	104051-1-05-01	1100	Staff & Intern. Consultants	0.00		0.00

				Released Budget	Expenditure	Funds Available
		1500	Local travel	0.00		0.00
		1700	Nat. Consult./Staff	15,916.44	15,916.44	0.00
		3500	International Meetings	0.00		0.00
		4500	Equipment	0.00		0.00
		5100	Other Direct Costs	505.87	505.87	0.00
		Result		16,422.31	16,422.31	0.00
	104051-1-05-03	1100	Staff & Intern. Consultants	0.00		0.00
		1700	Nat. Consult./Staff	0.00		0.00
		Result		0.00		0.00
2015	104051-1-01-01	1100	Staff & Intern. Consultants	0.00		0.00
		1700	Nat. Consult./Staff	0.00		0.00
		2100	Contractual Services	222.54	222.54	0.00
		3500	International Meetings	0.00		0.00
		4500	Equipment	0.00		0.00
		5100	Other Direct Costs	52.67	52.67	0.00
		Result		275.21	275.21	0.00
	104051-1-02-02	5100	Other Direct Costs	0.00		0.00
		Result		0.00		0.00
	104051-1-03-02	1100	Staff & Intern. Consultants	0.00		0.00
		2100	Contractual Services	12,879.43	12,879.43	0.00
		5100	Other Direct Costs	571.27	571.27	0.00
		Result		13,450.70	13,450.70	0.00
	104051-1-04-02	2100	Contractual Services	0.00	0.00	0.00
		3500	International Meetings	19,510.49	19,510.49	0.00
		5100	Other Direct Costs	792.28	792.28	0.00
		Result		20,302.77	20,302.77	0.00
	104051-1-05-01	1100	Staff & Intern. Consultants	0.00		0.00
		1500	Local travel	1,147.71	1,147.71	0.00
		1700	Nat. Consult./Staff	40,510.81	40,510.81	0.00
		3500	International Meetings	0.00		0.00
		4500	Equipment	0.00		0.00
		5100	Other Direct Costs	-458.36	-458.36	0.00
		Result		41,200.16	41,200.16	0.00
	104051-1-05-03	1100	Staff & Intern. Consultants	0.00		0.00
		1700	Nat. Consult./Staff	5,781.15	5,781.15	0.00
		5100	Other Direct Costs	11.46	11.46	0.00

				Released Budget	Expenditure	Funds Available
		Result		5,792.61	5,792.61	0.00
2016	104051-1-01-01	5100	Other Direct Costs	0.00	245.69	-245.69
		Result		0.00	245.69	-245.69
	104051-1-02-02	5100	Other Direct Costs	0.00		0.00
		Result		0.00		0.00
	104051-1-03-02	1100	Staff & Intern. Consultants	0.00		0.00
		2100	Contractual Services	0.00	0.00	0.00
		5100	Other Direct Costs	0.00	0.00	0.00
		Result		0.00	0.00	0.00
	104051-1-04-02	2100	Contractual Services	0.00	0.00	0.00
		3500	International Meetings	0.00		0.00
		5100	Other Direct Costs	0.00	0.00	0.00
		Result		0.00	0.00	0.00
	104051-1-05-01	1500	Local travel	0.00		0.00
		1700	Nat. Consult./Staff	63,155.67	62,225.78	929.89
		2100	Contractual Services	25,115.19	24,494.56	620.63
		3500	International Meetings	0.00		0.00
		4500	Equipment	0.00		0.00
		5100	Other Direct Costs	78.40	-78.40	156.80
		Result		88,349.26	86,641.94	1,707.32
	104051-1-05-03	1100	Staff & Intern. Consultants	0.00		0.00
		1700	Nat. Consult./Staff	5,610.88	5,467.50	143.38
		5100	Other Direct Costs	0.00		0.00
		Result		5,610.88	5,467.50	143.38
2017	104051-1-05-01	1500	Local travel	6,625.10		6,625.10
		1700	Nat. Consult./Staff		30,975.42	-30,975.42
		2100	Contractual Services	60,298.96	2,546.37	57,752.59
		3500	International Meetings	9,921.60		9,921.60
		5100	Other Direct Costs	79.86		79.86
		Result		76,925.52	33,521.79	43,403.73
	104051-1-05-03	1100	Staff & Intern. Consultants	12,412.94		12,412.94
		1700	Nat. Consult./Staff	3,688.17		3,688.17
		5100	Other Direct Costs	988.54		988.54
		Result		17,089.65		17,089.65
				2,440,422.45	2,378,324.06	62,098.39
				2,440,422.45	2,378,324.06	62,098.39

Source: ERP database, UNIDO Project manager

Scope and Purpose of the Evaluation

The terminal evaluation will cover the whole duration of the project from its starting date in July 2010 to the estimated completion date in December 2016. It will assess project performance against the evaluation criteria: relevance, effectiveness, efficiency, sustainability and impact.

The terminal evaluation has an additional purpose of drawing lessons and developing recommendations for UNIDO and the GEF that may help for improving the selection, enhancing the design and implementation of similar future projects and activities in the country and on a global scale upon project completion. The terminal evaluation report should include examples of good practices for other projects in a focal area, country, or region.

The evaluation team should provide an analysis of the attainment of the main objective and specific objectives under the four core project components. Through its assessments, the evaluation team should enable the Government, counterparts, the GEF, UNIDO and other stakeholders and donors to verify prospects for development impact and sustainability, providing an analysis of the attainment of global environmental objectives, project objectives, delivery and completion of project outputs/activities, and outcomes/impacts based on indicators. The assessment includes re-examination of the relevance of the objectives and other elements of project design according to the project evaluation parameters defined in chapter VI.

The key question of the terminal evaluation is whether the project has achieved or is likely to achieve the project objective, i.e. by the end of the project Morocco would have treated and reclaimed at least 3,000 tons of PCB-contaminated mineral oil and 2,000 tons of PCB contaminated electrical equipment.

Evaluation Approach and Methodology

The terminal evaluation will be conducted in accordance with the UNIDO Evaluation Policy, the UNIDO Guidelines for the Technical Cooperation Programmes and Projects, the GEF's 2008 Guidelines for Implementing and Executing Agencies to Conduct Terminal Evaluations, the GEF Monitoring and Evaluation Policy from 2010 and the Recommended Minimum Fiduciary Standards for GEF Implementing and Executing Agencies.

It will be carried out as an independent in-depth evaluation using a participatory approach whereby all key parties associated with the project are kept informed and regularly consulted throughout the evaluation. The evaluation team leader will liaise with the UNIDO Independent Evaluation Division (IEV) on the conduct of the evaluation and methodological issues.

The evaluation team will be required to use different methods to ensure that data gathering and analysis deliver evidence-based qualitative and quantitative information, based on diverse sources: desk studies and literature review, statistical analysis, individual interviews, focus group meetings, surveys and direct observation. This approach will not only enable the evaluation to assess causality through quantitative means but also to provide reasons for why certain results were achieved or not and to triangulate information for higher reliability of findings. The concrete mixed methodological approach will be described in the inception report.

The evaluation team will develop interview guidelines. Field interviews can take place either in the form of focus-group discussions or one-to-one consultations.

The methodology will be based on the following:

- A desk review of project documents including, but not limited to:
  - The original project document, monitoring reports (such as progress and financial reports to UNIDO and GEF annual Project Implementation Review (PIR) reports), output reports (case studies, action plans, sub-regional strategies, etc.) and relevant correspondence.
- Notes from the meetings of committees involved in the project (e.g. approval and steering committees).
- Other project-related material produced by the project.
- The evaluation team will use available models of (or reconstruct if necessary) theory of change for the different types of intervention (enabling, capacity, investment, demonstration). The validity of the theory of change will be examined through specific questions in interviews and possibly through a survey of stakeholders.
- Counterfactual information: In those cases where baseline information for relevant indicators is not available the evaluation team will aim at establishing a proxy-baseline through recall and secondary information.
- Interviews with project management and technical support including staff and management at UNIDO HQ and in the field and – if necessary - staff associated with the project's financial administration and procurement.
- Interviews with project partners including Government counterparts, GEF focal points and partners that have been selected for co-financing as shown in the corresponding sections of the project documents.
- On-site observation of results achieved in demonstration projects, including interviews of actual and potential beneficiaries of improved technologies.
- Interviews and telephone interviews with intended users for the project outputs and other stakeholders involved with this project. The evaluator shall determine whether to seek additional information and opinions from representatives of any donor agencies or other organizations.
- Interviews with the relevant UNIDO Country Office and the project's management and Project Steering Committee (PSC) members and the various national and sub-regional authorities dealing with project activities as necessary. If deemed necessary, the evaluator shall also gain broader perspectives from discussions with relevant GEF Secretariat staff.
- Other interviews, surveys or document reviews as deemed necessary by the evaluator and/or UNIDO EVA.

- The inception report will provide details on the methodology used by the evaluation team and include an evaluation matrix.

Evaluation Team Composition

The evaluation team will be composed of one international evaluation consultant acting as a team leader and one national evaluation consultant.

The evaluation team should be able to provide information relevant for follow-up studies, including evaluation verification on request to the GEF partnership up to two years after completion of the evaluation.

Both consultants will be contracted by UNIDO. The tasks of each team member are specified in the job descriptions attached to these terms of reference. The lead international evaluation consultant is expected to be fluent both in English and in French, as the final report will be delivered in English, while most interviews/ reports are in French.

Members of the evaluation team must not have been directly involved in the design and/or implementation of the programme/projects.

The Project Manager at UNIDO and the Project Management Unit will support the evaluation team. The UNIDO GEF Coordinator will be briefed on the evaluation and equally provide support to its conduct.

Time Schedule and Deliverables

The evaluation is scheduled to take place in in the period from January 2017 to June 2017. The field mission is planned for spring 2017. An evaluation field mission will be arranged during the evaluation conduct.

At the end of the evaluation field mission, a local debriefing should be conducted inviting local stakeholders (incl. government and parties involved in the evaluation). After the evaluation mission, the international evaluation consultant will come to UNIDO HQ for debriefing and presentation of the preliminary findings of the terminal evaluation. The draft TE report will be submitted 2 to 4 weeks after the end of the mission.

The draft TE report is to be shared with stakeholders (e.g. the UNIDO PM, ODG/EVQ/IEV and other relevant stakeholders as well as the UNIDO GEF Coordinator and the GEF OFP for receipt of comments and factual validation. The ET is expected to revise the draft TE report based on the comments received, edit the language and form and submit the final version of the TE report in accordance with UNIDO Evaluation standards.

Project Evaluation Parameters

The evaluation team will rate the projects. The *ratings for the parameters described in the following sub-chapters A to J will be presented in the form of a table* with each of the categories rated separately and with brief justifications for the rating based on the findings of the main analysis. An overall rating for the project should also be given. The rating system to be applied is specified in Annexes 1 and 2.

Project design

The evaluation will examine the extent to which:

the project's design is adequate to address the problems at hand;

a participatory project identification process was instrumental in selecting problem areas and national counterparts;

the project has a clear thematically focused development objective, the attainment of which can be determined by a set of verifiable indicators;

the project was formulated based on the logical framework (project results framework) approach;

the project was formulated with the participation of national counterpart and/or target beneficiaries; and

relevant country representatives (from government, industries and civil society) have been appropriately involved and were participating in the identification of critical problem areas and the development of technical cooperation strategies.

Project relevance

The evaluation will examine the extent to which the project is relevant to the:

national development and environmental priorities and strategies of the Government and population of the country, and regional and international agreements. See possible evaluation questions under "Country ownership/driveness" below.

target groups: relevance of the project's objectives, outcomes and outputs to the different target groups of the interventions (e.g. companies, civil society, beneficiaries of capacity building and training, etc.).

GEF's focal areas/operational programme strategies: In retrospect, were the project's outcomes consistent with the focal areas/operational program strategies of GEF? Ascertain the likely nature and significance of the contribution of the project outcomes to the wider portfolio of GEF's Focal area and Operational Program.

UNIDO's thematic priorities: Were they in line with UNIDO's mandate, objectives and outcomes defined in the Programme & Budget and core competencies?

Does the project remain relevant taking into account the changing environment? Is there a need to reformulate the project design and the project results framework given changes in the country and operational context?

Effectiveness:

Objectives and planned final results at the end of the project

The evaluation will assess to what extent results at various levels, including outcomes, have been achieved. In detail, the following issues will be assessed: To what extent have the expected outputs, outcomes and long-term objectives been achieved or are likely to be achieved? Has the project generated any results that could lead to changes of the assisted institutions? Have there been any unplanned effects?

Are the project outcomes commensurate with the original or modified project objectives? If the original or modified expected results are merely outputs/inputs, the evaluators should assess if there were any real outcomes of the project and, if there were, determine whether these are commensurate with realistic expectations from the project.

How do the stakeholders perceive the quality of outputs? Were the targeted beneficiary groups actually reached?

What outputs and outcomes has the project achieved so far (both qualitative and quantitative results)? Has the project generated any results that could lead to changes of the assisted institutions? Have there been any unplanned effects?

Identify actual and/or potential longer-term impacts or at least indicate the steps taken to assess these (see also below "monitoring of long term changes"). Wherever possible, evaluators should indicate how findings on impacts will be reported in future.

Describe any catalytic or replication effects: the evaluation will describe any catalytic or replication effect both within and outside the project. If no effects are identified, the evaluation will describe the catalytic or replication actions that the project carried out. No ratings are requested for the project's catalytic role.

Efficiency

The extent to which:

The project cost was effective? Was the project using the least cost options?

Has the project produced results (outputs and outcomes) within the expected time frame? Was project implementation delayed, and, if it was, did that affect cost effectiveness or results? Wherever possible, the evaluator should also compare the costs incurred and the time taken to achieve outcomes with that for similar projects. Are the project's activities in line with the schedule of activities as defined by the project team and annual work plans? Are the disbursements and project expenditures in line with budgets?

Have the inputs from the donor, UNIDO and Government/counterpart been provided as planned, and were they adequate to meet requirements? Was the quality of UNIDO inputs and services as planned and timely?

Was there coordination with other UNIDO and other donors' projects, and did possible synergy effects happen?

Assessment of sustainability of project outcomes

Sustainability is understood as the likelihood of continued benefits after the GEF project ends. Assessment of sustainability of outcomes will be given special attention but also technical, financial and organization sustainability will be reviewed. This assessment should explain how the risks to project outcomes will affect continuation of benefits after the GEF project ends. It will include both exogenous and endogenous risks. The following four dimensions or aspects of risks to sustainability will be addressed:

Financial risks. Are there any financial risks that may jeopardize sustainability of project outcomes? What is the likelihood of financial and economic resources not being available once GEF assistance ends? (Such resources can be from multiple sources, such as the public and private sectors or income-generating activities; these can also include trends that indicate the likelihood that, in future, there will be adequate financial resources for sustaining project outcomes.) Was the project successful in identifying and leveraging co-financing?

Sociopolitical risks. Are there any social or political risks that may jeopardize sustainability of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that project benefits continue to flow? Is there sufficient public/stakeholder awareness in support of the project's long-term objectives?

Institutional framework and governance risks. Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize sustainability of project benefits? Are requisite systems for accountability and transparency, and required technical know-how, in place?

Environmental risks. Are there any environmental risks that may jeopardize sustainability of project outcomes? Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher-level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits? The evaluation should assess whether certain activities will pose a threat to the sustainability of the project outcomes.

Assessment of monitoring and evaluation systems

M&E design. Did the project have an M&E plan to monitor results and track progress towards achieving project objectives? The Evaluation will assess whether the project met the minimum requirements for the application of the Project M&E plan (see Annex 3).

M&E plan implementation. The evaluation should verify that an M&E system was in place and facilitated timely tracking of progress toward project objectives by collecting information on chosen indicators continually throughout the project implementation period; annual project reports were complete and accurate, with well-justified ratings; the information provided by the M&E system was used during the project to improve performance and to adapt to changing needs; and the project had an M&E system in place with proper training for parties responsible for M&E activities to ensure that data will continue to be collected and used after project closure. Were monitoring and self-evaluation carried out effectively, based on indicators for outputs, outcomes and impacts? Are there any annual work plans? Was any steering or advisory mechanism put in place? Did reporting and performance reviews take place regularly?

Budgeting and Funding for M&E activities. In addition to incorporating information on funding for M&E while assessing M&E design, the evaluators will determine whether M&E was sufficiently budgeted for at the project planning stage and whether M&E was adequately funded and in a timely manner during implementation.

Monitoring of long-term changes

The monitoring and evaluation of long-term changes is often incorporated in GEF-supported projects as a separate component and may include determination of environmental baselines; specification of indicators; and provisioning of equipment and capacity building for data gathering, analysis, and use. This section of the evaluation report will describe project actions and accomplishments toward establishing a long-term monitoring system. The review will address the following questions:

Did this project contribute to the establishment of a long-term monitoring system? If it did not, should the project have included such a component?

What were the accomplishments and shortcomings in establishment of this system?

Is the system sustainable—that is, is it embedded in a proper institutional structure and does it have financing? How likely is it that this system continues operating upon project completion?

Is the information generated by this system being used as originally intended?

Assessment of processes affecting achievement of project results

Among other factors, when relevant, the evaluation will consider a number of issues affecting project implementation and attainment of project results. The assessment of these issues can be integrated into the analyses of project design, relevance, effectiveness, efficiency, sustainability and management as the evaluators find them fit (it is not necessary; however, it is possible to have a separate chapter on these aspects in the evaluation report). The evaluation will consider, but need not be limited to, the following issues that may have affected project implementation and achievement of project results:

Preparation and readiness / Quality at entry. Were the project's objectives and components clear, practicable, and feasible within its time frame? Were counterpart resources (funding, staff, and facilities), and adequate project management arrangements in place at project entry? Were the capacities of executing institution and counterparts properly considered when the project was designed? Were lessons from other relevant projects properly incorporated in the project design? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project approval?

Country ownership/drivenness. Was the project concept in line with the sectoral and development priorities and plans of the country—or of participating countries, in the case of multi-country projects? Are project outcomes contributing to national development priorities and plans? Were the relevant country representatives from government and civil society involved in the project? Did the recipient government maintain its financial commitment to the project? Has the government—or governments in the case of multi-country projects—approved policies or regulatory frameworks in line with the project's objectives?

Stakeholder involvement. Did the project involve the relevant stakeholders through information sharing and consultation? Did the project implement appropriate outreach and public awareness campaigns? Were the relevant vulnerable groups and powerful supporters and opponents of the processes properly involved? Which stakeholders were involved in the project (i.e. NGOs, private sector, other UN Agencies etc.) and what were their immediate tasks? Did the project consult with and make use of the skills, experience, and knowledge of the appropriate government entities, nongovernmental organizations, community groups, private sector entities, local governments, and academic institutions in the design, implementation, and evaluation of project activities? Were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process taken into account while taking decisions? Were the relevant vulnerable groups and the powerful, the supporters and the opponents, of the processes properly involved?

Financial planning. Did the project have appropriate financial controls, including reporting and planning, that allowed management to make informed decisions regarding the budget and allowed for timely flow of funds? Was there due diligence in the management of funds and financial audits? Did promised co-financing materialize? Specifically, the evaluation should also include a breakdown of final actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co- financing.

UNIDO's supervision and backstopping. Did UNIDO staff identify problems in a timely fashion and accurately estimate their seriousness? Did UNIDO staff provide quality support and advice to the project, approve modifications in time, and restructure the project when needed? Did UNIDO provide the right staffing levels, continuity, skill mix, and frequency of field visits for the project?

Co-financing and project outcomes and sustainability. If there was a difference in the level of expected co-financing and the co-financing actually realized, what were the reasons for the variance? Did the extent of materialization of co-financing affect project outcomes and/or sustainability, and, if so, in what ways and through what causal linkages?

Delays and project outcomes and sustainability. If there were delays in project implementation and completion, what were the reasons? Did the delays affect project outcomes and/or sustainability, and, if so, in what ways and through what causal linkages?

Implementation approach[14]. Is the implementation approach chosen different from other implementation approaches applied by UNIDO and other agencies? Does the approach comply with the principles of the Paris Declaration? Does the approach promote local ownership and capacity building? Does the approach involve significant risks?

The evaluation team will rate the project performance as required by the GEF. The ratings will be given to four criteria: Project Results, Sustainability, Monitoring and Evaluation, and UNIDO related issues as specified in Annex 2. The ratings will be presented in a table with each of the categories rated separately and with brief justifications for the rating based on the findings of the main analysis. An overall rating for the project should also be given. The rating system to be applied is specified in the same annex. As per the GEF's requirements, the report should also provide information on project identification, time frame, actual expenditures, and co-financing in the format in Annex 5, which is modeled after the GEF's project identification form (PIF).

Project coordination and management

The extent to which:

The national management and overall coordination mechanisms have been efficient and effective? Did each partner have assigned roles and responsibilities from the beginning? Did each partner fulfil its role and responsibilities (e.g. providing strategic support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/corrective actions…)?

The UNIDO HQ and Filed Office based management, coordination, monitoring, quality control and technical inputs have been efficient, timely and effective (problems identified timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix and frequency of field visits…)?

The national management and overall coordination mechanisms were efficient and effective? Did each partner have specific roles and responsibilities from the beginning till the end? Did each partner fulfill its role and responsibilities (e.g. providing strategic support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/corrective actions…)? Were the UNIDO HQ based management, coordination, quality control and technical inputs efficient, timely and effective (problems identified timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix and frequency of field visits…)?

Assessment of gender mainstreaming

The evaluation will consider, but need not be limited to, the following issues that may have affected gender mainstreaming in the project:

Did the project/programme design adequately consider the gender dimensions in its interventions? If so, was gender considered at the level of project outcome, output or activity?

Was a gender analysis included in a baseline study or needs assessment (if any)? Were there gender-related project indicators?

How gender-balanced was the composition of the project management team, the Steering Committee, experts and consultants and the beneficiaries?

Have women and men benefited equally from the project's interventions? Do the results affect women and men differently? If so, why and how? How are the results likely to affect gender relations (e.g., division of labour, decision-making authority)?

Are women/gender-focused groups, associations or gender units in partner organizations consulted / included in the project?

To what extent were socioeconomic benefits delivered by the project at the national and local levels, including consideration of gender dimensions?

Further guidance on integrating gender is included in Annex 4.

Deliverables and Reporting

Inception report

These terms of reference (TOR) provide some information on the evaluation methodology, but this should not be regarded as exhaustive. After reviewing the project documentation and initial interviews with the project manager, the evaluation team will prepare a short inception report that will operationalize the TOR relating to the evaluation questions and provide information on what type of and how the evidence will be collected (methodology). It will be discussed with and approved by the responsible in the UNIDO Independent Evaluation Division.

[14] Implementation approach refers to the concrete manifestation of cooperation between UNIDO, Government counterparts and local implementing partners. Usually POPs projects apply a combination of agency execution (direct provision of services by UNIDO) with elements of national execution through sub-contracts.

The inception report will focus on the following elements: preliminary project theory model(s); elaboration of evaluation methodology including quantitative and qualitative approaches through an evaluation framework ("evaluation matrix"); division of work between the international evaluation consultants; mission plan, including places to be visited, people to be interviewed and possible surveys to be conducted and a debriefing and reporting timetable[15].

Evaluation report and review procedures

The draft report will be delivered to UNIDO Independent Evaluation Division (the suggested report outline is in Annex 1) and circulated to relevant UNIDO staff and national stakeholders associated with the project for factual validation and comments. Any comments or feedback on any errors of fact to the draft report provided by the stakeholders will be sent to the evaluation team (c.c. ODG/EVQ/IEV) for their consideration and any necessary revisions. On the basis of this feedback, and taking into consideration the comments received, the evaluation team will prepare the final version of the terminal evaluation report.

The terminal evaluation report should be brief, to the point and easy to understand. It must explain the purpose of the evaluation, exactly what was evaluated, and the methods used. The report must highlight any methodological limitations, identify key concerns and present evidence-based findings, consequent conclusions, recommendations and lessons. The report should provide information on when the evaluation took place, the places visited, who was involved and be presented in a way that makes the information accessible and comprehensible. The report should include an executive summary that encapsulates the essence of the information contained in the report to facilitate dissemination and distillation of lessons.

Findings, conclusions and recommendations should be presented in a complete, logical and balanced manner. The evaluation report shall be written in English and follow the outline given in Annex 1.

Evaluation work plan and deliverables

The "Evaluation Work Plan" includes the following main phases and products/deliverables:

INCEPTION PHASE:

Desk review, briefing by project manager and development of methodology: Following the receipt of all relevant documents, and consultation with the Project Manager about the documentation, including reaching an agreement on the methodology, the desk review could be completed.

Inception report: At the time of departure to the field mission, all the received material has been reviewed and consolidated into the Inception report.

FIELD MISSION:

Field mission: The principal responsibility for managing this evaluation lies with UNIDO. It will be responsible for liaising with the project team to set up the stakeholder interviews, arrange the field missions, coordinate with the Government. At the end of the field mission, there will be a presentation of preliminary findings to the key stakeholders in the country where the project was implemented.

Preliminary findings from the field mission: Following the field mission, the key findings, conclusions and recommendations would be prepared (preferably in Power point slides) and presented in the field and at UNIDO Headquarters.

REPORTING:

Data analysis/collation of the data/information collected.

A draft terminal evaluation report will be submitted electronically to the UNIDO Independent Evaluation Division and circulated to main stakeholders. For feedback and factual validation

Final terminal evaluation report: considering/incorporating comments/feedback received.

Quality assurance

All UNIDO evaluations are subject to quality assessments by the UNIDO Independent Evaluation Division. Quality assurance and control is exercised in different ways throughout the evaluation process (briefing of consultants on methodology and process by the UNIDO, ODG/EVQ/IEV, providing inputs regarding findings, lessons learned and recommendations from other UNIDO evaluations, review of inception report and evaluation report by UNIDO, ODG/EVQ/IEV). The quality of the evaluation report will be assessed and rated against the criteria set forth in the checklist on evaluation report quality, attached as Annex 5. The applied evaluation quality assessment criteria are used as a tool to provide structured feedback. UNIDO, ODG/EVQ/IEV should ensure that the evaluation report is useful for UNIDO in terms of organizational learning (recommendations and lessons learned) and is compliant with UNIDO's evaluation policy and these terms of reference. The draft and final evaluation report are reviewed by the UNIDO Independent Evaluation Division, who will circulate it within UNIDO and relevant stakeholders together with a management response sheet.

[15] The evaluator will be provided with a Guide on how to prepare an evaluation inception report prepared by the UNIDO Independent Evaluation Division.

Annex 1 - Outline of an In-depth Project Evaluation Report

Executive summary

Must provide a synopsis of the storyline which includes the main evaluation findings and recommendations

Must present strengths and weaknesses of the project

Must be self-explanatory and should be 3-4 pages in length

Evaluation objectives, methodology and process

Information on the evaluation: why, when, by whom, etc.

Scope and objectives of the evaluation, main questions to be addressed

Information sources and availability of information

Methodological remarks, limitations encountered and validity of the findings

Countries and project background

Brief countries context: an overview of the economy, the environment, institutional development, demographic and other data of relevance to the project

Sector-specific issues of concern to the project[16] and important developments during the project implementation period

Project summary:

Fact sheet of the project: including project objectives and structure, donors and counterparts, project timing and duration, project costs and co-financing

Brief description including history and previous cooperation

Project implementation arrangements and implementation modalities, institutions involved, major changes to project implementation

Positioning of the UNIDO project (other initiatives of government, other donors, private sector, etc.)

Counterpart organization(s)

Project assessment

This is the key chapter of the report and should address all evaluation criteria and questions outlined in the TOR (see section VI Project Evaluation Parameters). Assessment must be based on factual evidence collected and analyzed from different sources. The evaluators' assessment can be broken into the following sections:

Design

Relevance (Report on the relevance of project towards countries and beneficiaries)

Effectiveness (The extent to which the development intervention's objectives and deliverables were achieved, or are expected to be achieved, taking into account their relative importance)

Efficiency (Report on the overall cost-benefit of the project and partner Countries contribution to the achievement of project objectives)

Sustainability of Project Outcomes (Report on the risks and vulnerability of the project, considering the likely effects of sociopolitical and institutional changes in partner countries, and its impact on continuation of benefits after the GEF project ends, specifically the financial, sociopolitical, institutional framework and governance, and environmental risks)

Assessment of monitoring and evaluation systems (Report on M&E design, M&E plan implementation, and Budgeting and funding for M&E activities)

[16] Explicit and implicit assumptions in the logical framework of the project can provide insights into key-issues of concern (e.g. relevant legislation, enforcement capacities, government initiatives, etc.)

Monitoring of long-term changes

Assessment of processes affecting achievement of project results (Report on preparation and readiness / quality at entry, country ownership, stakeholder involvement, financial planning, UNIDO support, co-financing and project outcomes and sustainability, delays of project outcomes and sustainability, and implementation approach)

Project coordination and management (Report project management conditions and achievements, and partner countries commitment)

Gender mainstreaming

At the end of this chapter, an overall project achievement rating should be developed as required in Annex 2. The overall rating table required by the GEF should be presented here.

Conclusions, Recommendations and Lessons Learned

This chapter can be divided into three sections:

Conclusions

This section should include a storyline of the main evaluation conclusions related to the project's achievements and shortfalls. It is important to avoid providing a summary based on each and every evaluation criterion. The main conclusions should be cross-referenced to relevant sections of the evaluation report.

Recommendations

This section should be succinct and contain few key recommendations. They should:

be based on evaluation findings

realistic and feasible within a project context

indicate institution(s) responsible for implementation (addressed to a specific officer, group or entity who can act on it) and have a proposed timeline for implementation if possible

be commensurate with the available capacities of project team and partners

take resource requirements into account.

Recommendations should be structured by addressees:

UNIDO

Government and/or Counterpart Organizations

Donor

Lessons Learned

Lessons learned must be of wider applicability beyond the evaluated project but must be based on findings and conclusions of the evaluation

For each lesson, the context from which they are derived should be briefly stated

Annexes should include the evaluation TOR, list of interviewees, documents reviewed, a summary of project identification and financial data, and other detailed quantitative information. Dissident views or management responses to the evaluation findings may later be appended in an annex.

Annex 2 – Rating tables

Ratings will be presented in the form of tables with each of the criteria / aspects rated separately and with brief justifications for the rating based on the findings and the main analyses (see Table 1 to Table 3) below. Table 4 presents the template for summarizing the overall ratings.

Table 1. Rating criteria for Quality of project identification and formulation process (LFA Process)

Evaluation issue	Evaluator's comments	Ratings
Extent to which the situation, problem, need / gap is clearly identified, analysed and documented (evidence, references).		
Adequacy and clarity of the stakeholder analysis (clear identification of end-users, beneficiaries, sponsors, partners, and clearly defined roles and responsibilities in the project(s)).		
Adequacy of project monitoring and evaluation (M&E) design.		
Overall LFA design process.		

Table 2. Quality of project design (LFM)

Evaluation issue	Evaluator's comments	Rating
Clarity and adequacy of outcome (clear, realistic, relevant, addressing the problem identified). Does it provide a clear description of the benefit or improvement that will be achieved after project completion?		
Clarity and adequacy of outputs (realistic, measurable, adequate for leading to the achievement of the outcome).		
Clarity, consistency and logic of the objective tree, and its reflexion in the LFM results hierarchy from activities to outputs, to outcome and to overall objective.		
Indicators are SMART for Outcome and Output levels.		
Adequacy of Means of Verification and Assumptions (including important external factors and risks).		
Overall LFM design quality.		

Table 3. Quality of project implementation performance

Evaluation criteria	Rating	
Ownership and relevance: to national development priorities and Government strategies; to target groups; to UNIDO's mandate and thematic priorities; to Donor's priorities; counterpart(s) were appropriately involved in the identification of critical problem areas and in the development of implementation strategies; supported actively project implementation including through in-kind and cash contributions; and the project(s) / programme are relevant to the ISID agenda).		
Effectiveness: objectives and final results at the end of the project (outputs were produced; outcome(s) were achieved or are likely to be achieved through the operation of outputs; and the project/programme contributed to inclusive and sustainable industrial development).		
Efficiency (UNIDO, Donors, implementing agencies and counterpart inputs have been provided as planned and were adequate to meet requirements; the quality of UNIDO, Donors, implementing agencies and counterpart inputs and services (expertise, training, methodologies, etc.) was as planned and led to the production of outputs; UNIDO procurement services were provided as planned and were adequate in terms of timing, value, process issues, responsibilities; the project used the most cost-efficient option and was cost-effective etc.).		
Impact (which long term developmental changes, e.g. economic, environmental, social and inclusiveness, have occurred or are likely to occur as a result of the intervention).		
Likelihood of/ risks to sustainability (results achieved so far are sustainable; the project was replicated/had a multiplying effect; a sustainability strategy was formulated; and what are the prospects/riks for technical, organizational, financial, socio-political, institutional framework and governance, and environmental sustainability).		
Project management (the national management and overall field coordination mechanisms of the project have been efficient and effective; the UNIDO management, coordination, quality control and technical inputs have been efficient and effective; changes in planning documents during implementation have been approved and documented; and synergy benefits can be found in relation to other UNIDO activities in the country or elsewhere).		
M&E (monitoring and self-evaluation was carried out based on indicators for outputs, outcomes and objectives; M&E activities were documented; and M&E information was used for project steering and adaptive management).		

Table 4. Overall ratings

Criterion	Evaluator's summary comments	Evaluator's rating
Attainment of project objectives and results (overall rating), sub criteria (below)		
Project implementation		
Effectiveness		
Relevance		
Efficiency		
Sustainability of project outcomes (overall rating), sub criteria (below)		
Financial risks		
Sociopolitical risks		
Institutional framework and governance risks		
Environmental risks		

Criterion	Evaluator's summary comments	Evaluator's rating
Monitoring and evaluation (overall rating), sub criteria (below)		
M&E Design		
M&E Plan implementation (use for adaptive management)		
Budgeting and Funding for M&E activities		
Project Formulation		
LFA (Situation, stakeholder, problem and objective analyses / Preparation and readiness)		
Project Design		
Project Design (LFM, main elements of the project, i.e. overall objective, outcomes, outputs, their causal relationship, indicators, means of verification and assumptions)		
Project management - UNIDO specific ratings		
Implementation approach		
UNIDO Supervision and backstopping		
Overall Project rating		

RATING OF PROJECT OBJECTIVES AND RESULTS

Highly satisfactory (HS): The project had no shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

Satisfactory (S): The project had minor shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

Moderately satisfactory (MS): The project had moderate shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

Moderately unsatisfactory (MU): The project had significant shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

Unsatisfactory (U) The project had major shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

Highly unsatisfactory (HU): The project had severe shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

Please note: Relevance and effectiveness will be considered as critical criteria. The overall rating of the project for achievement of objectives and results may not be higher than the lowest rating on either of these two criteria. Thus, to have an overall satisfactory rating for outcomes a project must have at least satisfactory ratings on both relevance and effectiveness.

RATINGS ON SUSTAINABILITY

Sustainability will be understood as the probability of continued long-term outcomes and impacts after the project funding ends. The evaluation will identify and assess the key conditions or factors that are likely to contribute or undermine the persistence of benefits beyond project completion. Some of these factors might be outcomes of the project, i.e. stronger institutional capacities, legal frameworks, socio-economic incentives /or public awareness. Other factors will include contextual circumstances or developments that are not outcomes of the project but that are relevant to the sustainability of outcomes.

Rating system for sustainability sub-criteria

On each of the dimensions of sustainability of the project outcomes will be rated as follows.

Likely (L): There are no risks affecting this dimension of sustainability.

Moderately likely (ML). There are moderate risks that affect this dimension of sustainability.

Moderately unlikely (MU): There are significant risks that affect this dimension of sustainability.

Unlikely (U): There are severe risks that affect this dimension of sustainability.

All the risk dimensions of sustainability are critical. Therefore, overall rating for sustainability will not be higher than the rating of the dimension with lowest ratings. For example, if a project has an Unlikely rating in either of the dimensions then its overall rating cannot be higher than Unlikely, regardless of whether higher ratings in other dimensions of sustainability produce a higher average.

RATINGS OF PROJECT M&E

Monitoring is a continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing project with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds. Evaluation is the systematic and objective assessment of an on-going or completed project, its design, implementation and results. Project evaluation may involve the definition of appropriate standards, the examination of performance against those standards, and an assessment of actual and expected results.

The Project M&E system will be rated on M&E design, M&E plan implementation and budgeting and funding for M&E activities as follows:

Highly satisfactory (HS): There were no shortcomings in the project M&E system.

Satisfactory(S): There were minor shortcomings in the project M&E system.

Moderately satisfactory (MS): There were moderate shortcomings in the project M&E system.

Moderately unsatisfactory (MU): There were significant shortcomings in the project M&E system.

Unsatisfactory (U): There were major shortcomings in the project M&E system.

Highly unsatisfactory (HU): The Project had no M&E system.

M&E plan implementation will be considered a critical parameter for the overall assessment of the M&E system. The overall rating for the M&E systems will not be higher than the rating on M&E plan implementation.

All other ratings will be on the following six-point scale:

HS	= Highly satisfactory	Excellent
S	= Satisfactory	Well above average
MS	= Moderately satisfactory	Average
MU	= Moderately unsatisfactory	Below average
U	= Unsatisfactory	Poor
HU	= Highly unsatisfactory	Very poor (appalling)

Annex 3 - GEF Minimum requirements for M&E[17]

Minimum requirement 1: Project design of M&E

All projects will include a concrete and fully budgeted M&E plan by the time of work program entry for full-sized projects (FSP) and CEO approval for medium-sized projects (MSP). This M&E plan will contain as a minimum:

SMART indicators for project implementation, or, if no indicators are identified, an alternative plan for monitoring that will deliver reliable and valid information to management;

SMART indicators for results (outcomes and, if applicable, impacts), and, where appropriate, indicators identified at the corporate level;

Baseline for the project, with a description of the problem to be addressed, with indicator data, or, if major baseline indicators are not identified, an alternative plan for addressing this within one year of implementation;

Identification of reviews and evaluations that will be undertaken, such as mid-term reviews or evaluations of activities; and

Organizational set-up and budgets for monitoring and evaluation.

Minimum requirement 2: Application of project M&E

Project monitoring and supervision will include implementation of the M&E plan, comprising:

SMART indicators for implementation are actively used, or if not, a reasonable explanation is provided;

SMART indicators for results are actively used, or if not, a reasonable explanation is provided;

The baseline for the project is fully established and data compiled to review progress reviews, and evaluations are undertaken as planned; and

The organizational set-up for M&E is operational and budgets are spent as planned.

[17] http://www.thegef.org/gef/sites/thegef.org/files/documents/ME_Policy_2010.pdf

Annex 4 – Guidance on integrating gender in evaluations of UNIDO projects and programmes

Introduction

Gender equality is internationally recognized as a goal of development and is fundamental to sustainable growth and poverty reduction. The UNIDO Policy on gender equality and the empowerment of women and its addendum, issued respectively in April 2009 and May 2010 (UNIDO/DGB(M).110 and UNIDO/DGB(M).110/Add.1), provides the overall guidelines for establishing a gender mainstreaming strategy and action plans to guide the process of addressing gender issues in the Organization's industrial development interventions.

According to the UNIDO Policy on gender equality and the empowerment of women:

Gender equality refers to the equal rights, responsibilities and opportunities of women and men and girls and boys. Equality does not suggest that women and men become 'the same' but that women's and men's rights, responsibilities and opportunities do not depend on whether they are born male or female. Gender equality implies that the interests, needs and priorities of both women and men are taken into consideration, recognizing the diversity of different groups of women and men. It is therefore not a 'women's issues'. On the contrary, it concerns and should fully engage both men and women and is a precondition for, and an indicator of sustainable people-centered development.

Empowerment of women signifies women gaining power and control over their own lives. It involves awareness-raising, building of self-confidence, expansion of choices, increased access to and control over resources and actions to transform the structures and institutions which reinforce and perpetuate gender discriminations and inequality.

Gender parity signifies equal numbers of men and women at all levels of an institution or organization, particularly at senior and decision-making levels. The UNIDO projects/programmes can be divided into two categories: 1) those where promotion of gender equality is one of the key aspects of the project/programme; and 2) those where there is limited or no attempted integration of gender. Evaluation managers/evaluators should select relevant questions depending on the type of interventions.

Gender responsive evaluation questions

The questions below will help evaluation managers/evaluators to mainstream gender issues in their evaluations.

B.1 Design

Is the project/programme in line with the UNIDO and national policies on gender equality and the empowerment of women?

Were gender issues identified at the design stage?

Did the project/programme design adequately consider the gender dimensions in its interventions? If so, how?

Were adequate resources (e.g., funds, staff time, methodology, experts) allocated to address gender concerns?

To what extent were the needs and priorities of women, girls, boys and men reflected in the design?

Was a gender analysis included in a baseline study or needs assessment (if any)?

If the project/programme is people-centered, were target beneficiaries clearly identified and disaggregated by sex, age, race, ethnicity and socio-economic group?

If the project/programme promotes gender equality and/or women's empowerment, was gender equality reflected in its objective/s? To what extent are output/outcome indicators gender disaggregated?

B.2 Implementation management

Did project monitoring and self-evaluation collect and analyze gender disaggregated data?

Were decisions and recommendations based on the analyses? If so, how?

Were gender concerns reflected in the criteria to select beneficiaries? If so, how?

How gender-balanced was the composition of the project management team, the Steering Committee, experts and consultants and the beneficiaries?

If the project/programme promotes gender equality and/or women's empowerment, did the project/programme monitor, assess and report on its gender related objective/s?

B.3 Results

Have women and men benefited equally from the project's interventions? Do the results affect women and men differently? If so, why and how? How are the results likely to affect gender relations (e.g., division of labour, decision making authority)?

In the case of a project/programme with gender related objective/s, to what extent has the project/programme achieved the objective/s? To what extent has the project/programme reduced gender disparities and enhanced women's empowerment?

Annex 5 – Checklist on terminal evaluation report quality

Independent terminal evaluation of project:

Project Title:

UNIDO Project NO:

UNIDO SAP ID:

GEF ID:

Evaluation team leader:

Quality review done by:

Date:

CHECKLIST ON EVALUATION REPORT QUALITY

Report quality criteria	UNIDO ODG/EVQ/IEV assessment notes	Rating
Was the report well-structured and properly written? (Clear language, correct grammar, clear and logical structure)		
Was the evaluation objective clearly stated and the methodology appropriately defined?		
Did the report present an assessment of relevant outcomes and achievement of project objectives?		
Was the report consistent with the ToR and was the evidence complete and convincing?		
Did the report present a sound assessment of sustainability of outcomes or did it explain why this is not (yet) possible? (Including assessment of assumptions, risks and impact drivers)		
Did the evidence presented support the lessons and recommendations? Are these directly based on findings?		
Did the report include the actual project costs (total, per activity, per source)?		
Did the report include an assessment of the quality of both the M&E plan at entry and the system used during the implementation? Was the M&E sufficiently budgeted for during preparation and properly funded during implementation?		
Quality of the lessons: were lessons readily applicable in other contexts? Did they suggest prescriptive action?		
Quality of the recommendations: did recommendations specify the actions necessary to correct existing conditions or improve operations ('who?' 'what?' 'where?' 'when?'). Can these be immediately implemented with current resources?		
Are the main cross-cutting issues, such as gender, human rights and environment, appropriately covered?		
Was the report delivered in a timely manner? (Observance of deadlines)		

Rating system for quality of evaluation reports

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, and unable to assess = 0.

A**nnex 6 – Required Project Identification and Financial Data**

The evaluation report should provide information on project identification, time frame, actual expenditures, and co-financing in the following format, which is modeled after the project identification form (PIF).

I. Project general information:

Project Title	Safe PCB Management Programme in Morocco, Pillar II
GEF project ID	3883
UNIDO project No.	104051
Country(ies)	Morocco
GEF Focal Area and Operational Program	Chemical and Wastes - Persistent Organic Pollutants
GEF Agencies (Implementing Agency)	UNIDO
Project Executing Partner	Directorate for Environmental Monitoring and Prevention of Environmental Risks (DSPR) of MEMEE
Project Implementation Start Date	July 2010
Project Duration (Months)	77
GEF Grant (USD)	2,437,600
UNIDO Agency Fee (USD)	243,760
UNIDO Inputs (USD)	50,000
Counterpart Inputs - Co-financing (USD) at CEO Endorsement	4,806,000

II. Dates

Milestone	Expected Date	Actual Date
Project CEO Endorsement/Approval Date	15 April 2009	15 April 2009
Project Implementation Start Date (PAD Issuance Date)	July 2010	July 2010
Original Expected Implementation End Date (indicated in CEO Endorsement/Approval document)	July 2013	December 2016
Revised Expected Implementation End Date (if any)		December 2016
Terminal evaluation completion	June 2017	
Planned Tracking Tool Date		

III. Project Framework

Project Component	**Activity Type**	**GEF Financing** (in USD)		**Co-financing** (in USD)	
		Approved	**Actual**	**Promised**	**Actual**
Outcome 1	National experts(+travel)	*114,000*			
Outcome 1	Subcontract	*102,000*			
Outcome 1	Analysis/review			*86,000*	
Outcome 1	Translation	*1,800*			
Outcome 2	National experts(+travel)	*103,500*			
Outcome 2	Int. consultants	*69,000*			
Outcome 2	Translation	*1,800*			
Outcome 2	Subcontract	*1,200,000*			
Outcome 2	Treatment of PCB-contaminated oil and metals			*370,000*	
Outcome 2	Plant acquisition			*2,109,000*	

Project Component	Activity Type	GEF Financing (in USD)		Co-financing (in USD)	
		Approved	Actual	Promised	Actual
Outcome 2	Technical Assessment			*382,000*	
Outcome 3	National experts(+travel)	*103,500*			
Outcome 3	Int. consultants	*69,000*			
Outcome 3	Subcontract	*500,000*			
Outcome 3	Translation	*1,800*			
Outcome 3	Plans acquisition			*1,109,000*	
Outcome 3	Technical Assessment			*384,000*	
Outcome 3	Decontamination of PCB-contaminated transformers			*250,000*	
Outcome 4	CTA	*36,000*			
Outcome 4	Int. consultants	*33,000*			
Outcome 4	NPM	*16,200*			
Outcome 4	National experts(+travel	*41,000*			
Outcome 4	Administrative	*15,000*			
Outcome 4	Workshops	*20,000*			
Outcome 4	Equipment	*10,000*			
Outcome 4	Development of Project Monitoring management structure			*65,000*	
Outcome 4	Design and Implement an M&E mechanism			*74,000*	
Outcome 4	External evaluation			*27,000*	
Project management		*243760*			
Total		*2,681,360*		*4,856,000*	

Activity types are:
Experts, researches hired, technical assistance, Workshop, Meetings or expert's consultation scientific and technical analysis, expert's researches hired
Promised co-financing refers to the amount indicated on endorsement/approval.

IV. Co-financing

		Project preparation		Project implementation		Total	
Source of co-financing	Type	Expected	Actual	Expected	Actual	Expected	Actual
Host gov't contribution		252,000				252,000	
GEF Agency(ies)- UNIDO		50,000				50,000	
Bilateral aid agency(ies)							
Multilateral agency(ies)							
Private sector		604,000				604,000	
NGO							
Other – Technology providers		3,950,000					
Total co-financing		*4,856,000*				*4,856,000*	

Expected amounts are those submitted by the GEF Agencies in the original project appraisal document. Co-financing types are grant, soft loan, hard loan, guarantee, in kind, or cash.

Annex 7 – Job descriptions

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

Title:	International evaluation consultant, team leader
Main Duty Station and Location:	Home-based
Missions:	Missions to Vienna, Austria and Morocco
Start of Contract (EOD):	March, 2017
End of Contract (COB):	May, 2017
Number of Working Days:	30 working days spread over 3 months

ORGANIZATIONAL CONTEXT

The UNIDO Independent Evaluation Division (ODG/EVQ/IEV) is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides factual information about result and practices that feed into the programmatic and strategic decision-making processes. Evaluation is an assessment, as systematic and impartial as possible, of a programme, a project or a theme. Independent evaluations provide evidence-based information that is credible, reliable and useful, enabling the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. ODG/EVQ/IEV is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

PROJECT CONTEXT

Detailed background information of the project can be found the terms of reference (TOR) for the terminal evaluation.

DUTIES AND RESPONSIBILITIES

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
1. Review project documentation and relevant country background information (national policies and strategies, UN strategies and general economic data); determine key data to collect in the field and adjust the key data collection instrument of 3A accordingly (if needed); Assess the adequacy of legislative and regulatory framework relevant to the project's activities and analyze other background info.	Adjust table of evaluation questions, depending on country specific context; Draft list of stakeholders to interview during the field missions; Brief assessment of the adequacy of the country's legislative and regulatory framework.	6 days	Home-based
2. Briefing with the UNIDO Independent Evaluation Division, project managers and other key stakeholders at UNIDO HQ. Preparation of the Inception Report	Detailed evaluation schedule with tentative mission agenda (incl. list of stakeholders to interview and site visits); mission planning; Division of evaluation tasks with the National Consultant. Inception Report	2 days	Vienna, Austria

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
3. Conduct field mission to Morocco in March 2017[18].	Conduct meetings with relevant project stakeholders, beneficiaries, the GEF Operational Focal Point (OFP), etc. for the collection of data and clarifications; Agreement with the National Consultant on the structure and content of the evaluation report and the distribution of writing tasks; Evaluation presentation of the evaluation's initial findings prepared, draft conclusions and recommendations to stakeholders in the country, including the GEF OFP, at the end of the mission.	7 days	Morocco
4. Present overall findings and recommendations to the stakeholders at UNIDO HQ	After field mission(s): Presentation slides, feedback from stakeholders obtained and discussed	2 days	Vienna, Austria
5. Prepare the evaluation report, with inputs from the National Consultant, according to the TOR; Coordinate the inputs from the National Consultant and combine with her/his own inputs into the draft evaluation report. Share the evaluation report with UNIDO HQ and national stakeholders for feedback and comments.	Draft evaluation report.	8 days	Home-based
6. Revise the draft project evaluation report based on comments from UNIDO Independent Evaluation Division and stakeholders and edit the language and form of the final version according to UNIDO standards.	Final evaluation report.	5 days	Home-based
	TOTAL	30 days	

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education:

Advanced degree in environment, energy, engineering, development studies or related areas

Technical and functional experience:

Minimum of 10 years' experience in project management and/or evaluation (of development projects)

Strong experience on environmental/energy and knowledge about GEF operational programs and strategies and about relevant GEF policies such as those on project life cycle, M&E, incremental costs, and fiduciary standards

Experience in the evaluation and knowledge of UNIDO activities an asset

Knowledge about multilateral technical cooperation and the UN, international development priorities and frameworks

Working experience in developing countries

Languages:

Fluency in written and spoken English and French is required.

Reporting and deliverables

1) At the beginning of the assignment the Consultant will submit a concise Inception Report that will outline the general methodology and presents a concept Table of Contents;

[18] The exact mission dates will be decided in agreement with the Consultant, UNIDO HQ, and the country counterparts.

2) The country assignment will have the following deliverables:

Presentation of initial findings of the mission to key national stakeholders;

Draft report;

Final report, comprising of executive summary, findings regarding design, implementation and results, conclusions and recommendations.

3) Debriefing at UNIDO HQ:

Presentation and discussion of findings;

Concise summary and comparative analysis of the main results of the evaluation report.

All reports and related documents must be in English and presented in electronic format.

Absence of conflict of interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the UNIDO Independent Evaluation Division.

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

Title:	National evaluation consultant
Main Duty Station and Location:	Home-based
Mission/s to:	Travel to potential sites within Morocco
Start of Contract:	March 2017
End of Contract:	May 2017
Number of Working Days:	30 days spread over 2 months

ORGANIZATIONAL CONTEXT

The UNIDO Independent Evaluation Division is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides factual information about result and practices that feed into the programmatic and strategic decision-making processes. Evaluation is an assessment, as systematic and impartial as possible, of a programme, a project or a theme. Independent evaluations provide evidence-based information that is credible, reliable and useful, enabling the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. The UNIDO Independent Evaluation Division is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

PROJECT CONTEXT

The national evaluation consultant will evaluate the projects according to the terms of reference (TOR) under the leadership of the team leader (international evaluation consultant). S/he will perform the following tasks:

MAIN DUTIES	**Concrete/measurable outputs to be achieved**	**Expected duration**	**Location**
Review and analyze project documentation and relevant country background information (national policies and strategies, UN strategies and general economic data); in cooperation with the Team Leader: determine key data to collect in the field and prepare key instruments in both English and local language (questionnaires, logic models) to collect these data through interviews and/or surveys during and prior to the field missions; Coordinate and lead interviews/ surveys in local language and assist the team leader with translation where necessary; Analyze and assess the adequacy of legislative and regulatory framework, specifically in the context of the project's objectives and targets; provide analysis and advice to the team leader on existing and appropriate policies for input to the team leader.	List of detailed evaluation questions to be clarified; questionnaires/interview guide; logic models; list of key data to collect, draft list of stakeholders to interview during the field missions Drafting and presentation of brief assessment of the adequacy of the country's legislative and regulatory framework in the context of the project.	8 days	Home-based
Review all project outputs/ publications/feedback; Briefing with the evaluation team leader, UNIDO project managers and other key stakeholders. Coordinate the evaluation mission agenda, ensuring and setting up the required meetings with project partners and government counterparts, and organize and lead site visits, in close cooperation with the Project Management Unit. Assist and provide detailed analysis and inputs to the team leader in the preparation of the inception report.	Interview notes, detailed evaluation schedule and list of stakeholders to interview during the field missions. Division of evaluation tasks with the Team Leader. Inception Report.	7 days	Home-based (telephone interviews)
Coordinate and conduct the field mission with the team leader in cooperation with the Project Management Unit, where required;	Presentations of the evaluation's initial findings, draft conclusions and	7 days (including travel	Morocco

MAIN DUTIES	Concrete/measurable outputs to be achieved	Expected duration	Location
Consult with the team leader on the structure and content of the evaluation report and the distribution of writing tasks.	recommendations to stakeholders in the country at the end of the mission. Agreement with the Team Leader on the structure and content of the evaluation report and the distribution of writing tasks.	days)	
Prepare inputs and analysis to the evaluation report according to TOR and as agreed with the Team Leader.	Draft evaluation report prepared.	6 days	Home-based
Revise the draft project evaluation report based on comments from UNIDO Independent Evaluation Division and stakeholders and edit the language and form of the final version according to UNIDO standards.	Final evaluation report prepared.	2 days	Home-based
TOTAL		30 days	

REQUIRED COMPETENCIES

Core values:

1. Integrity
2. Professionalism
3. Respect for diversity

Core competencies:

1. Results orientation and accountability
2. Planning and organizing
3. Communication and trust
4. Team orientation
5. Client orientation
6. Organizational development and innovation

Managerial competencies (as applicable):

1. Strategy and direction
1. Managing people and performance
2. Judgement and decision making
3. Conflict resolution

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education: Advanced university degree in science, engineering or other relevant discipline like developmental studies.

Technical and functional experience:

Exposure to the needs, conditions and problems in developing countries.

Familiarity with the institutional context of the project is desirable.

Experience in the field of environment and energy, including evaluation of development cooperation in developing countries is an asset

Languages: Fluency in written and spoken English and French is required.

Absence of conflict of interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the UNIDO Independent Evaluation Division.

Annex 2: List of interviewees

First & Surname	Institution	Email	Date of the meeting
Ms. Farah Bouqartacha	ONUDI/Coordinatrice du projet PCB pilier II		27 March 2017
Ms. Fouzia Zerrouk	ONUDI/Assistante du projet PCB pilier II	f.zerrouk@unido.org	27 March 2017
Mr. Mehdi Chalabi	Ministère délégué auprès du Ministre de l'Energie, Mines, Eau et Environnement, chargé de l'Environnement, Directeur des Programmes et Réalisations	chalabi@environnement.gov.ma	27 March 2017
Mr. Jamal Aboud	Ministère délégué auprès du Ministre de l'Energie, Mines, Eau et Environnement, chargé de l'Environnement, Chef de division		27 March 2017
	Ministère délégué auprès du Ministre de l'Energie, Mines, Eau et Environnement, chargé de l'Environnement, Direction Contrôle, de l'évaluation environnementale et des affaires juridiques		
	Ministère délégué auprès du Ministre de l'Energie, Mines, Eau et Environnement, chargé de l'Environnement, Direction du Partenariat, de la Communication, de la coopération et suivi des projets GEF		
Mr. Berrami Khalifa	ONEE Branche Eau	kberrami@yahoo.fr	27 March 2017
Ms. Ghedda Khadija	ONEE Branche Eau	kghedda@onee.ma	27 March 2017
Ms. Raiss Wafae	ONEE Branche Eau	wraiss@onee.ma	27 March 2017
Ms. Loubna Rag El Hassi	REDAL	Loubna.ragelhassi@veoliaservices.ma	27 March 2017
Mr. Ghani Driss	REDAL		27 March 2017

First & Surname	Institution	Email	Date of the meeting
Mr. Errazaki Noureddine	OKSA		28 March 2017
Mr. Legriech Aziz	Amendis (Tétouan)	legriech@yahoo.fr	28 March 2017
Mr. Kotbi Hassan	Amendis	hassankotbi@amendis.ma	28 March 2017
Mr. Lakehal Noureddine	Amendis	Noureddine.lakehal@amendis.ma	28 March 2017
Mr. El Hannaoui Hamid	Amendis	Hamid.elhannaoui@amendis.ma	28 March 2017
Mr. Elfeddali Mohamed	Amendis	elfeddali@gmail.com	28 March 2017
Ms. Bennani Sara	RADEEF (Fès)		28March 2017
Mr. Omar Echafi	Maroc Maintenance Environnement	Omar.echafi@Ms.co.ma	29 March 2017
Mr. Nicolas Rupp	Trédi	n.rupp@groupe-seche.com	29 March 2017
Mr. Tanguy Philippe	Trédi		29 March 2017
Mr. Tarik Benmoha	Lydec (Casablanca)	Tarik.benmoha@lydec.co.ma	29 March 2017
Ms. Majidi Rajae	Lydec	Rajae.majidi@lydec.co.ma	29 March 2017
Mr. Azmani Redouane	Lydec	Reouane.azmani@lydec.co.ma	29 March 2017
Mr. Ais Zoubir	ONEE Branche Électricité		29 March 2017
Ms. Bassouk Fatima Zahra	ONEE Branche Électricité		29 March 2017
Project Steering Committee	**See attached list**		30 March 2017
Mr. Mountassir Youssef	GIZ, Conseiller technique senior, projet Gouvernance environnementale et climatique	Youssef.mountassir@giz.de	30 March 2017
Ms. Oufedjikh Fatima	Direction des Régies/Ministère de l'Intérieur	Division des études et analyses	31 March 2017
Ms. El Idrissi Akka Madiha	Direction des Régies/Ministère de l'Intérieur	Division technique/Service électricité	31 March 2017

First & Surname	Institution	Email	Date of the meeting
Mr. El Bouch	Ministère chargé de l'environnement/Laboratoire National		31 March 2017
Mr. El Othmani	Ministère chargé de l'environnement/Laboratoire National		31 March 2017
Mr. El Kebriti	Ministère chargé de l'environnement/Laboratoire National		31 March 2017
Mr. El Ouahidi	Ministère chargé de l'environnement/Laboratoire National		31 March 2017
Mr. Tazarni	Ministère chargé de l'environnement/Laboratoire National		31 March 2017
Ms. Hanan Hanzaz	Représentante ONUDI à Rabat	h.hanzaz@unido.org	14 April 2017

Annex 3: List of participants to the debriefing session at UNIDO

- Mr. Smail Alhilali, PTC/ENV/IRE
- Ms. Svitlana Adler, PTC/ENV/IRE
- Mr. Javier Guarnizo, ODG/EVQ/IEV
- Ms. Müge Dolun, ODG/EVQ/IEV
- Mr. Francesco Cuda, ODG/EVQ/IEV
- Mr. Klaus Tyrkkoe, PTC/ENV/SCD
- Mr. A.O. Ajani, PTC/ENV/SCD
- Mr. Alfredo Cueva, PTC/ENV/SCD
- Ms. Fatin Ali Mohamed, PTC/ENV/SCD
- Ms. Erlinda Galvan, PTC/ENV/SCD
- Ms. Pamela Mikschofsky, PTC/PRM/EPD

Annex 4: List of documents reviewed

• Project Document and its annexes (A to J)
• Rapport de l'atelier de lancement, février 2010
• Protocole d'accord entre l'ONUDI et le Secrétariat d'Etat auprès du Ministère de l'Energie, des Mines, de l'Eau et de l'Environnement signé le 21 juin 2011
• Note méthodologique d'identification des transformateurs potentiellement contaminés, Mohammed Adnane Benabdelkrim, mars 2011
• Note sur les méthodes d'analyse des PCB dans les huiles des transformateurs et les déchets, Mohammed Adnane Benabdelkrim, janvier 2012
• Contrat ONUDI – OKSA analyses de contrôle des huiles des transformateurs décontaminés, avril 2012
• Dossier 1er Appel d'Offre lancé en 2012 pour le recrutement du consortium
• Dossier 2ème Appel d'Offre lancé en août 2013 pour le recrutement du consortium
• Offre financière consortium du 31 octobre 2013
• Dossier campagne d'analyses des transformateurs réalisées par OKSA
• PV réunion tripartite MDE- ONUDI – PNUD, 26 décembre 2013
• Etude d'impact sur l'environnement de la plateforme, Etudes et Mesures les 5 domaines, 2014
• Contrat ONUDI – TREDI du 25 février 2014
• Etude des prix des Transformateurs et Condensateurs au Maroc et Développement d'Instruments Incitatifs pour accélérer le remplacement des appareils à PCB, Cabinet I.C Performances,
• Etude des Prix des Transformateurs et Condensateurs au Maroc et Développement d'Instruments Incitatifs pour accélérer le remplacement des appareils à PCB, Cabinet I.C Performances, juin 2014.
• Acceptabilité environnementale du 26 janvier 2015
• Autorisation des autorités locales du 11 mars 2015
• Rapport Audit et Contrôle d'efficacité de la plateforme, AXE QSSE, Octobre 2015
• Dossier inauguration de la plateforme (novembre 2015)
• Revues annuelles du projet pour les années 2010 à 2014
• PIRs from 2012 to 2016
• Annual Work plans 2015- 2017
• Evaluation à mi-parcours du projet, Khalid Anouar, Janvier 2016
• Réunion du Comité de pilotage du 15 février 2016 : PV et présentation Powerpoint
• Réunion du Comité de pilotage du 14 avril 2016 : PV et présentation Powerpoint
• Réunion du Comité de pilotage du 9 juin 2016 : PV et présentation Powerpoint
• Réunion du Comité pilotage du 25 octobre 2016 : PV et présentation Powerpoint
• Réunion du Comité de pilotage du 16 février 2017 : PV et présentation Powerpoint
• Courrier + Présentation TREDI à l'ONUDI (Vienne) en septembre 2016

• Fiche-note de la CNP à Mme la Ministre sur les préparatifs de l'inauguration de la plateforme (novembre 2015)
• Fiche-note de la CNP au Secrétaire d'Etat sur le fonctionnement de la plateforme (septembre 2016)
• Fiche-note de la CNP au Secrétaire d'Etat sur le planning prévisionnel des activités de la plateforme
• Fiche note de la CNP à Mme la Ministre sur le statut de la plateforme
• Bordereau des prix de TREDI concernant le transport
• Programmes des 4 ateliers de formation organisés entre octobre et novembre 2016
• Rapport final sur le déroulement des 4 ateliers de formation, Youssef Bennouna, 2016
• Tableau suivi élimination des PCB du 4 décembre 2015 au 12 janvier 2017, CNP
• UNIDO budget execution as of March 2017
• Performances financières du projet 2015 – 2016, CNP
• Suivi budgétaire 2009-2016, CNP
• Projet de loi relative à la gestion et au contrôle des produits chimiques, MDE, mars 2016
• GEF PIF MSP Phase II PCB Management and Elimination in Morocco

Annex 5: Agenda of the in-country mission

Planning d'entretiens et de visites du 27 au 31 mars 2017

Date	Heure	Institution
Lundi **27 mars**	**9h00-11h00** **11h00-11h15** **11h15-11h30** **11h30-11h45**	▪ Réunion de travail avec l'Unité de Gestion du Programme (UGP) ▪ Entretien avec la Direction du Projet. ▪ Entretien avec la Direction du Partenariat, de la Communication et de la Coopération. ▪ Entretien avec la Direction du Contrôle, de l'Evaluation, Environnementale et des Affaires Juridiques.
	14h00-15h00 **15h30-16h30** **17h00-17h30**	▪ Entretien avec l'ONEE-Br Eau ▪ Entretien avec la REDAL ▪ Entretien avec le Laboratoire OKSA
Mardi **28 mars**	**10h30-11h30**	▪ Entretien avec Amendis Tétouan
	15h00-16h00	▪ Entretien avec la RADEF (Régie de Fès)
Mercredi **29 mars**	**9h30-12h00**	▪ Visite de la PFN-PCB ▪ Entretien avec le Consortium Tredi-MME
	14h00-15h00 **15h30-16h30**	▪ Entretien avec la LYDEC ▪ Entretien avec l'ONEE Branche Electricité
Jeudi **30 mars**	**9h00-12h00**	▪ Réunion avec le Comité de Pilotage du Programme
	14h00-15h00 **15h30-16h30**	▪ Entretien avec la GIZ ▪ Entretien avec le PNUD (annulé)
Vendredi **31 Mars**	**9h00-12h00** **14h30-15h30** **16h00**	▪ Réunion de travail avec l'UGP ▪ Visite et entretien avec le responsable du Laboratoire National des Etudes et de la Surveillance de la Pollution. ▪ Entretien avec Mme Hanzaz La Représentante de l'ONUDI (annulé)

Annex 6: Evaluation Matrix

Evaluation criteria	Guiding evaluation questions	Means of assessment
A) Project Design	Extent to which: • The project 's design was adequate to address the problem at hand? • The participatory project identification process was instrumental in selecting problem areas and national counterparts? • The project has a clear thematically focused development objective, the attainment of which can be determined by a set of verifiable indicators? • The project was formulated based on the results framework approach? • The project was formulated with the participation of national counterparts and/or target beneficiaries and • Relevant country representatives (from government, industries and civil societies) have been appropriately involved and were participating in the identification of critical problem areas and the development of technical cooperation strategies?	Project document review Interviews
B) Project Relevance	Extent to which the project is relevant to the: • National development and environmental priorities and strategies of the Government and population of Morocco and regional and international agreements • Target groups (companies, civil society, beneficiaries of capacity building and training, etc.) • GEF's focal areas/operational programme strategies • UNIDO's thematic priorities	Documents review Interviews
C) Effectiveness	Extent to which: • The expected outputs, outcomes and long-term objectives have been achieved or are likely to be achieved? Has the project generated any results that could lead to changes of the assisted institutions? Have there been any unplanned effects? • What outputs and outcomes has the project achieved (both qualitative and quantitative results)? • Are the project outcomes commensurate with the original or modified project objectives? • How do the stakeholders perceive the quality of outputs? Were the targeted beneficiary groups actually reached? • Identify actual and/or potential longer-term impacts or at least indicate the steps taken to assess these. • Describe any catalytic or replication actions that the project carried out and if any, catalytic or replication effect both within and outside the project	Interviews Observations
D) Efficiency	Extent to which: • The project used the least cost options • Results were produced within the expected time frame? If project implementation was delayed, did that affect cost effectiveness or results? • Were the project's activities in line with the schedule of activities as defined by the annual work plans? • Were the disbursements and project expenditures in line with budgets?	Documents review Interviews

Evaluation criteria	Guiding evaluation questions	Means of assessment
	• Have the inputs from the donor, UNIDO, Government and other counterpart been provided as planned and were there adequate to meet requirements? • Was the quality of UNIDO inputs and services as planned and timely? • Was there coordination with other UNIDO and other donors' projects and did possibly synergy effects happen?	
E) Sustainability	• Are there financial risks that may jeopardize sustainability of project outcomes? • What is the likelihood of financial and economic resources not being available once GEF assistance ends? • Was the project successful in identifying and leveraging co-financing? • Are there any social or political risks that may jeopardize sustainability of project outcomes? • Do the various key stakeholders see that it is in their interest that project benefits continue to flow? • Is there sufficient public/stakeholder awareness in support of the project's long-term objectives? • Do the legal frameworks, policies and governance structures and processes pose risks that may jeopardize sustainability of project benefits? Are requisite systems for accountability and transparency and required technical know-how in place? • Are there any environmental risks that may jeopardize sustainability of project outcomes? Are there any environmental factors, positive or negative that can influence the future flow of project benefits? Are there any project outputs or higher-level results that are likely to affect the environment which, in turn, might affect sustainability of project benefits?	Interviews Documents review
F) M&E systems	• Did the project have an M&E plan to monitor results and track progress towards achieving project objectives? • Are there annual work plans? Was any steering or advisory mechanism put in place? Did reporting and performance reviews take place regularly? • Were monitoring and self-evaluation carried out effectively, based on indicators for outputs, outcomes and impacts? • Did the project have an M&E system in place with proper training for parties responsible for M&E activities to ensure that data will continue to be collected and used after project closure?	
G) Monitoring of long-term changes	• Did the project contribute to the establishment of a long-term monitoring system? If it did not, should the project have included such a component? • What were the accomplishments and shortcomings in establishment of this system? • Is the system embedded in a proper institutional structure and does it have financing? • Is the information generated by this system being used as originally intended?	
H) Factors affecting achievement of project results	• Preparation and readiness • Country ownership/drivenness • Stakeholder involvement • Financial planning • UNIDO's supervision and backstopping	

Evaluation criteria	Guiding evaluation questions	Means of assessment
	• Co-financing and project outcomes and sustainability • Delays • Implementation approach	
I) Coordination and Management	Extent to which: • The national management and overall coordination mechanisms have been efficient and effective • The UNIDO HQ and Field office based management, coordination, monitoring, quality control and technical inputs have been efficient, timely and effective	Interviews
J) Gender mainstreaming	• Is promotion of gender equality one of the key aspects of the project? • How gender-balanced was the composition of the project management team, the Steering committee, experts and consultants, beneficiaries? • Have women and men benefited equally from the project's interventions? • To what extent were socioeconomic benefits delivered by the project at the national and local levels, including consideration of gender dimensions?	Interviews Documents review