INDEPENDENT EVALUATION UNIT
OFFICE OF EVALUATION AND INTERNAL OVERSIGHT

# INDEPENDENT TERMINAL EVALUATION

## Environmentally sound management of polychlorinated biphenyl (PCB) - containing equipment and wastes and upgrade of technical expertise in Bolivia

UNIDO Project ID: 140296
GEF ID: 5646

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

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## GLOSSARY

| Term | Definition |
|---|---|
| Assumptions | Hypotheses about factors or risks, which could affect the progress or success of a development intervention.<br>Necessary conditions for the achievement of results at different levels. These are conditions that must exist if the project is to succeed but which are outside the direct control of the project management. This is called the external logic of the project because these conditions lie outside the project's accountability and can be related to laws, political commitments, political situation, financing, etc. |
| Baseline | The situation prior to a development intervention against which progress can be assessed or comparisons made. |
| Conclusions | Conclusions point out the factors of success and failure of the evaluated intervention, with special attention paid to the intended and unintended results and impacts, and more generally to any other strength or weakness. A conclusion draws on data collection and analyses undertaken, through a transparent chain of arguments. |
| Effectiveness | The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance. |
| Efficiency | A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results. |
| Environmental and Social Safeguards | The UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP) identifies a total of 12 operational safeguards pertaining to environmental social risks. Every UNIDO project needs to undergo an E&S screening to determine its level of risk and the appropriate mitigating action (if any) to be elaborated. |
| External evaluation/review | The evaluation/review of a development intervention conducted by entities and/or individuals outside the donor and implementing organizations. |
| Formative evaluation/review | Evaluation/review intended to improve performance, most often conducted during the implementation phase of programmes or projects. |

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| Gender mainstreaming | The process of assessing and supporting overcoming different implications for women and men of any planned action, including legislation, policies or projects, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and projects in all political, economic and societal spheres so that women and men participate and benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality. |
| Impacts | Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended. |
| Indicator | Quantitative or qualitative factor or variable that provides simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor. Means by which a change will be measured. Example: Total wastewater in t/yr. |
| Lessons learned | Generalizations based on evaluation experience with projects, or policies that abstract from the specific circumstances to broader situations. Frequently, lessons highlight strengths or weaknesses in preparation, design, and implementation that affect performance, outcome, and impact. |
| Logical framework | Management tool used to improve the design of interventions, most often at the project level. It involves identifying strategic elements (inputs, outputs, outcomes, impact) and their causal relationships, indicators and means of verification, and the assumptions or risks that may influence success and failure. It thus facilitates planning, execution, monitoring and evaluation of a development intervention. |
| Milestones | Interim targets; points in the lifetime of a project by which certain progress should have been made.<br>They provide an early warning system and are the basis for monitoring the trajectory of change during the lifetime of the project. |
| Monitoring | A continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds. |
| Outcome | The likely or achieved short-term and medium-term effects of an intervention's outputs. |

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| Outputs | The products, capital goods and services, which result from a development intervention within UNIDO's sphere of control; may also include changes resulting from the intervention which are relevant to the achievement of outcomes. |
| Project | A development intervention, which is designed to achieve specific objectives (outputs/outcomes) contributing to a higher objective (impact) within a given budget and a specific period of time, i.e., it has a beginning and an end. |
| Recommendations | Proposals aimed at enhancing the effectiveness, quality, or efficiency of a development intervention; at redesigning the objectives; and/or at the reallocation of resources. Recommendations should be linked to conclusions. |
| Relevance | The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities, and partners' and donors' policies.<br>Note: Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances. |
| Results | The output, outcome or impact (intended or unintended, positive and/or negative) of a development intervention. |
| Results-Based Management (RBM) | A management strategy focusing on performance and achievement of outputs, outcomes and impacts. |
| Risk analysis | An analysis or an assessment of factors (called assumptions in the logical framework) that affect or are likely to affect the successful achievement of an intervention's objectives. A detailed examination of the potential unwanted and negative consequences to human life, health, property, or the environment posed by development interventions; a systematic process to provide information regarding such undesirable consequences; the process of quantification of the probabilities and expected impacts for identified risks. |
| SINPCBS | Management Information Tool hosted in the Ministry of Environment and Water website. The tool allows to upload and update PCB equipment / wastes information. |
| Sustainability | The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time. |

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| Target | Definite ends to be achieved. Specifies a particular value that an indicator should reach by a specific date in the future. Example: Reduce by 50% the amount of wastewater in t/yr, between 2015 and 2020. |
| Theory of change | Theory of change, or project theory, is similar to a logic model, but includes key assumptions behind the causal relationships and sometimes the major factors (internal and external to the intervention) likely to influence the outcomes. |

For more related terms and definitions see also:

- UNIDO Quality Assurance Framework (QAF), DGB/2019/11
- IRPF Guide, AI/2020/02
- OECD-DAC Glossary of Key Terms in Evaluation and Results Based Management (2010)
- UNDG Results-based management handbook
- UNIDO e-learning course on: Results-based Management and the Logical Framework Approach
- UNIDO 2019 Policy on Gender Equality and the Empowerment of Women and Strategy for Gender Equality and the Empowerment of Women, 2020-2023

## ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| ESM | Environmentally Sound Management |
| GEF | Global Environment Facility |
| M&E | Monitoring and Evaluation |
| MOEW | Ministry of Environment and Water |
| NC | National Coordinator |
| POPs | Persistent Organic Pollutants |
| PCBs | Polychlorinated Biphenyls |
| PMU | Project Management Unit |
| PSC | Project Steering Committee |
| PRONACOPS | National Program of Persistent Organic Pollutants |
| SC | Stockholm Convention |
| TAC | Technical Advisory Committee |
| VMOEW | Vice ministry of Environment and Water |

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## EXECUTIVE SUMMARY

The project brought together different participants to meet the same objective and eliminate PCBs for the first time in Bolivia. One of the main achievements was awareness of PCBs' environmental and human health risks. After the project, the resources necessary for the ESM of PCBs are perceived as an investment; behavioural changes, including preventive measures throughout the sector and demystifying fieldwork with PCBs, are also identified. The project disposed of 149.6 tons of PCBs. The project executed USD 1.946.299, 97,31% (Jun 2022).

The project was designed for three years; however, it was completed in seven years. Three extensions were approved: the first due to a delay in the project start-up process, the second for the NC change and the third due to delays in the COVID context and cumulative effects of the two previous extensions. Despite the delays, the resources were sufficient for the implementation, but there is a gap between the PCB for disposal targeted and reached (400 tons in the design and 149.6 at the end of the execution). The partners mentioned they invested resources in sample analysis, updating inventory, building or repairing PCB storages, purchasing new equipment, personnel, etc. however, the co-financing data was unavailable.

The project developed a structure and tools to continue with the results achieved. The main products are a new regulation (it was partially socialized, and it is not clear how it will be tracked), technical tools for the ESM of PCBs, ESM and Final Disposal National Plan, methodology for updating inventories and final disposal, management information system for recording the inventory, capacity building and 15 pilots. Long-term sustainability depends on financial and government organizational structure risk management; the strategy developed did not include financial analysis. The support from UNIDO, PMU and NC and the participation of VMOEW, PRONACOPS and key stakeholders were commensurate with their available resources. The project's overall assessment is rated as "Moderately Satisfactory".

**TABLE 1. EVALUATION CRITERIA AND RATINGS**

| | Evaluation criteria | Rating |
|---|---|---|
| A | Impact (progress toward impact) | S |
| B | Project design | S |
| 1 | Overall design | S |
| 2 | Logframe | S |
| C | Project performance | MS |
| 1 | Relevance and Coherence | HS |
| 2 | Effectiveness | MS |
| 3 | Efficiency | MS |
| 4 | Sustainability of benefits | ML |
| D | Cross-cutting performance criteria | S |
| 1 | Gender mainstreaming | MS |

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|---|---|---|
| 2 | M&E and Reporting | S |
| 3 | Results-based Management (RBM) | HS |
| **E** | **Performance of partners** | **S** |
| 1 | Donor | HS |
| 2 | UNIDO | HS |
| 3 | National counterparts | MS |
| 4 | PCB owners | HS |
| **F** | **Overall assessment** | **MS** |

**RECOMMENDATIONS**

**To UNIDO**

1. Include as part of the terms of reference for companies responsible for final disposal evaluation visits before equipment collection, direct accompaniment during all fieldwork activities (additionally of local partners), and identify procedures for recording and managing inventories when highly relevant data is unavailable, such as the weight of the equipment.
2. To include a participatory self-evaluation process when the project cannot execute the Mid-term review. During the self-evaluations, the efficiency and effectiveness of the inputs and outcomes are analysed, and a roadmap and action plans are developed to achieve the expected results; this exercise reinforces cooperation between stakeholders and catalyses commitment and participation.
3. Include in the Project Implementation Reports co-financing funds execution information to ensure the availability of this information for the final evaluation. Additionally, include an annual financial analysis related to inventory, storage, and disposal process costs per unit (equipment/tons); this should be a performance indicator that can contribute to the tracking of the project and give information for future new projects' budget allocation design.
4. Strengthen the project start-up process. The project start-up process strengthens the implementation and identification of roles at the operational level and improves risk management; better usage of the inception workshop is recommended.
5. To include a financial assessment in the last PIR or to develop an additional document to know the final cost per PCB Ton treated and the future budget required for continuing the national disposal.
6. Identify the strengths and weaknesses of the person in charge of the National Coordination so that, in coordination with internal units/tools, new skills, and knowledge are integrated, for example, a gender approach in the implementation of projects.

**To National Government:**

1. Analyse how the delivery process of public goods can be facilitated when they are contaminated with PCBs since, at the moment, the process is not defined and generates a certain level of delay in equipment collection and disposal activities.

2. Strengthen PRONACOPS through investment in financial and human resources.
3. Within the framework of the National Implementation Plan for SC compliance, the level of support and participation of the different PCB owners should be analysed depending on their characteristics. For example, some companies are from the electrical sector with a considerable number of transformers; other ones, such as hospitals, have at most four equipment, and in consequence, the resources, knowledge and approach are different.

**LESSONS LEARNED AND GOOD PRACTICES**

1. Regional workshops for learning, knowledge exchange and identifying strategies are helpful and build collaboration between countries.
2. Access to quantitative analysis directly influences the level of participation and attitude toward the management of PCBs by owners; for example, changes in perception when, after analysing the inventory, the level of suspicious equipment is much lower than confirmed cases.
3. PCB owners may find additional challenges for waste management when there are initial nationalisation processes, especially when there is no clear identification of equipment ownership; the same happens when there are complex structures such as sectoral corporations.
4. The storage assessment visits before the PCB equipment collection processes were extremely productive since they identified the logistical requirements for the procedure, missing information and identification of the equipment's physical state; this permitted the identification of the best treatment and disposal strategy.
5. In the country, when an organization buys or maintains a transformer, they request a PCB negative test before buying or treatment; this strengthens the importance of avoiding cross-contamination.

## 1. EVALUATION OBJECTIVES, METHODOLOGY AND PROCESS

The United Nations Industrial Development Organization (UNIDO), in coordination with the Global Environment Facility (GEF) and the countries, are implementing a project portfolio to meet the Stockholm Convention (SC) objectives and agreements.

Given the number of Environmental Sound Management (ESM) of Polychlorinated biphenyls (PCBs) projects in the final phase of implementation phase and considering the significant similarities at the project design level, a cluster evaluation approach was used in eight countries, including Bolivia.[1]. The cluster approach aims to produce synergies and increase the value added in evaluations. The efficiency gains from this approach will be invested in additional learning and strategic assessments to inform UNIDO management, the Member States, donors and beneficiaries of the relevant and helpful evaluation findings, conclusions and recommendations.

[1] Cluster Evaluation countries: India, Russia, Lao, Morocco, Congo, Serbia, Guatemala and Bolivia.

### 1.1 Objectives

The Final evaluation has three main specific objectives:

a) Assess the project performance in terms of relevance, effectiveness, efficiency, sustainability, coherence, and progress to impact; and
b) Develop a series of findings, lessons and recommendations for enhancing the design and implementation of ongoing projects by UNIDO.
c) Contribute to organizational learning by UNIDO and its counterparts while being forward-looking, thus also guiding the development of new similar projects.

### 1.2 Methodology and process

The Final Evaluation is conducted in accordance with the UNIDO Evaluation Policy[2], the UNIDO Guidelines for the Technical Cooperation Project and Project Cycle[3], and UNIDO Evaluation Manual. The Final Evaluation is based on a combination of desk review of documents and available data[4], exploratory interviews with key stakeholders, semi-structured interviews with stakeholders with project responsibilities, an electronic survey and a fieldwork mission. The Final Evaluation uses a participatory approach, whereby key stakeholders are kept informed and consulted throughout the review process. Both quantitative and qualitative evaluation methods are used, as appropriate, to determine project achievements against the expected outputs, outcomes, and impacts. Additionally, triangulation of findings and data is carried out to reduce information gaps that would contribute to ensuring the robustness and validity of the assessment. Emerging findings, initial conclusions, and potential recommendations are presented to and discussed and validated with key project stakeholders, within the framework of a presentation, the final step is the submission of the final version of the report.

### 1.3 Information sources and availability of information

The Project National Coordinator (NC), PMU staff and project stakeholders provided the information required for the final evaluation during the final evaluation activities' implementation: documentation review, email survey, interviews and fieldwork mission in Santa Cruz, Bolivia.

### 1.4 Limitations of the evaluation

The project had three extensions; in total, since the LOA was signed until the end of the project, seven years passed; this situation produced some limitations because some information was missed. Another limitation during the evaluation was that the stakeholders' personnel rotation is high; many actors with essential project knowledge are not part of the organisations anymore, and having access to them was not possible. In contrast, some interviews were with new staff with limited information

[2] UNIDO (2021). Director General's Bulletin: Evaluation Policy (UNIDO/DGB/2021/11)
[3] UNIDO (2006). Director-General's Administrative Instruction No. 17/Rev.1: Guidelines for the Technical Cooperation Programme and Project Cycle (DGAI.17/Rev.1, 24 August 2006)
[4] Annex A: List of documents reviewed and stakeholders involved in the data collection process.

and experience related to the project. Finally, the project had three National Coordinators; sometimes, the transition process for information was not integral.

## 2. COUNTRY AND PROJECT BACKGROUND

### 2.1 Project Factsheet

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|---|---|
| **Project Title:** | *Environmentally sound management of polychlorinated biphenyl (PCB) - containing equipment and wastes and upgrade of technical expertise in Bolivia* |
| **GEF ID:** | *5646* |
| **UNIDO ID:** | *140296* |
| **GEF Replenishment Cycle:** | *GEF-5* |
| **Country(ies):** | *Bolivia* |
| **Region:** | *LAC - Latin America and Caribbean* |
| **GEF Focal Area:** | *Persistent Organic Pollutants (POPs)* |
| **Integrated Approach Pilot (IAP) Programs:** | *N/A* |
| **Stand-alone / Child Project:** | *N/A* |
| **Implementing Department/Division:** | *ENV / IPM* |
| **Co-Implementing Agency:** | *N/A* |
| **Executing Agency(ies):** | *Ministerio de Medio Ambiente y Agua* |
| **Project Type:** | *Medium-Sized Project (MSP)* |
| **Project Duration:** | *36 months* |
| **Extension(s):** | *3 extensions. Final until December 2022* |
| **GEF Project Financing:** | *USD 2,000,000* |
| **Agency Fee:** | *USD 190,000* |
| **Co-financing Amount:** | *USD 9,696,435* |
| **Date of CEO Endorsement/Approval:** | *11/20/2014* |
| **UNIDO Approval Date:** | *12/17/2014* |
| **Actual Implementation Start:** | *2/1/2015* |
| **Cumulative disbursement as of 30 June 2022:** | *To be completed by GEF Coordination Unit* |

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| **Original Project Completion Date:** | *2/1/2018* |
| **Project Completion Date as reported in FY21:** | *3/31/2022* |
| **Current SAP Completion Date:** | *12/31/2022* |
| **Expected Project Completion Date:** | *12/31/2022* |
| **Expected Terminal Evaluation (TE) Date:** | *12/31/2022* |
| **Expected Financial Closure Date:** | *1/31/2023* |
| **UNIDO Project Manager:** | *Mr. Alfredo Cueva* |

### 2.2 Country and Project Background

The Plurinational State of Bolivia ratified the Stockholm Convention (SC) on Persistent Organic Pollutants (POPs) in 2003 and submitted its first National Implementation Plan (NIP) to the Conference of Parties (COP) in September 2005. The NIP outlines the roadmap for the national management of the POPs and includes the preliminary inventory of the initially listed POPs, a prioritization of the national POPs issues and action plans for future implementation of the Convention. The NIP identified the establishment of an Environmental Management System for the environmentally sound management (ESM) of polychlorinated biphenyls (PCBs) as one of the top national priorities for the elimination and/or reduction of POPs. This medium-sized project (MSP) is the first post-NIP project executed in Bolivia under cooperation with the Stockholm Convention Unit at the Ministry of Environment and Water (PRONACOPS)

The Vice Ministry of Environment, Biodiversity, Climate Change and Forest Development Management (VEBCF) is the national POPs focal point and will be the national executing agency (NEA) for this project.

Bolivia has demonstrated a strong technical, political and financial interest in developing the ESM and disposal of PCBs. Therefore, there is a need to develop a structured national approach towards this objective that will help Bolivia fulfil part of its SC commitments; nonetheless, the country needs technical and financial assistance to strengthen its national capacity and this GEF funded project will contribute towards that change. Private and public stakeholders will be considered in the PCB inventory of this project.

### 2.3 Project Description

#### 2.3.1 Objective and components

The objective of this project is to strengthen national capacities for the ESM of PCBs including disposal for up to 400 tons of PCBs and related wastes and reduction/elimination of PCB releases from serviced electrical equipment at workshops and interim storage locations, to avoid cross-contamination of electrical equipment to protect human health and the environment.

The project has three components: Component 1 – Regulatory and institutional strengthening and awareness raising for the implementation of PCB-related measures of the SC on POPs, Component 2 – Environmentally sound management (ESM) of PCB-containing electrical equipment and waste and Component 3 – Project Monitoring and Evaluation.[5]

### 2.3.2 Project Key Stakeholders

The **GEF** Implementing Agency for the Project is UNIDO, with headquarters in Vienna and a local office in La Paz, Bolivia. Project reporting and monitoring requirements under the project coordination is addressed by UNIDO's project manager. The annual work plan is approved in accordance with this CEO approval and GEF policies. UNIDO's project manager works closely on follow-ups (e.g. administrative procedures such as customs clearance) together with UNIDO's field office in Bolivia. **UNIDO** provides project cycle management services for this project.

The executing counterpart, also entering subcontracts for project execution, is the Ministry of Environment and Water (MOEW); the project direct leadership and responsibility is the Vice Ministry of Environment and Water (**VMOEW),** the vice-ministry is the national POPs focal point and will be the national executing agency (NEA). In the VMOEW the operational unit responsible for coordinating all actions regarding the implementation of the SC is the National POPs Program office (**PRONACOPs**).

The Project Steering Committee (**PSC**) approves the Annual Work Plan and the Annual Budget within the scope of the project approved and subject to the GEF and UNIDO's established rules and regulations, the committee members are: (i) MoEW Chair the Project Steering Committee (ii) VMOEW, (iii) Ministry of Hydrocarbons, Energy and Mines, (iv) Yacimientos Petroliferos Fiscales Bolivianos (YFPB) - Bolivian state company dedicated to the exploration, exploitation, refining, industrialization, distribution and marketing of oil, natural gas and derivative products, and (v) UNIDO.

A Technical Advisory Committee (**TAC**) provides technical and practical recommendations with specific collaboration and consultations. In this committee, the most important project outputs are discussed and evaluated, the TAC is integrated by: The Electricity Bolivian Company (COBEE), Bolivian Mining Corporation (COMIBOL), National Company of Electricity Energy (ENDE), Ministry of Health

The project hired a **National Coordinator (NC)** who reports directly to UNIDO and coordinates with PRONACOPs the project implementation. PRONACOPS in turn reports to the Vice Ministry of Environment and Water the main political responsible for the project.

**The PCBs owners**[6] are responsible for the ESM implementation, to provide information for national inventory and for disposal their contaminated equipment and oils in accordance with the SC.

[5] For full detail check: Annex B. Project Logical Framework

[6] Electricity, mining, oil and cement sector and other Private stakeholders such as private and small consumers, maintenance companies, oil companies and, in particular, the mining industry are considered in the PCB inventory.

Other actors: ministries involved directly/indirectly: Ministry of Hydrocarbons and Energy, Ministry of Mining and Metallurgy, Ministry of Agricultural Development, Rural and Land Use, Ministry of Health and Sports, Ministry of Planning and Development, National Protected Areas System, the Public Universities System, Laboratories, Academia and general society

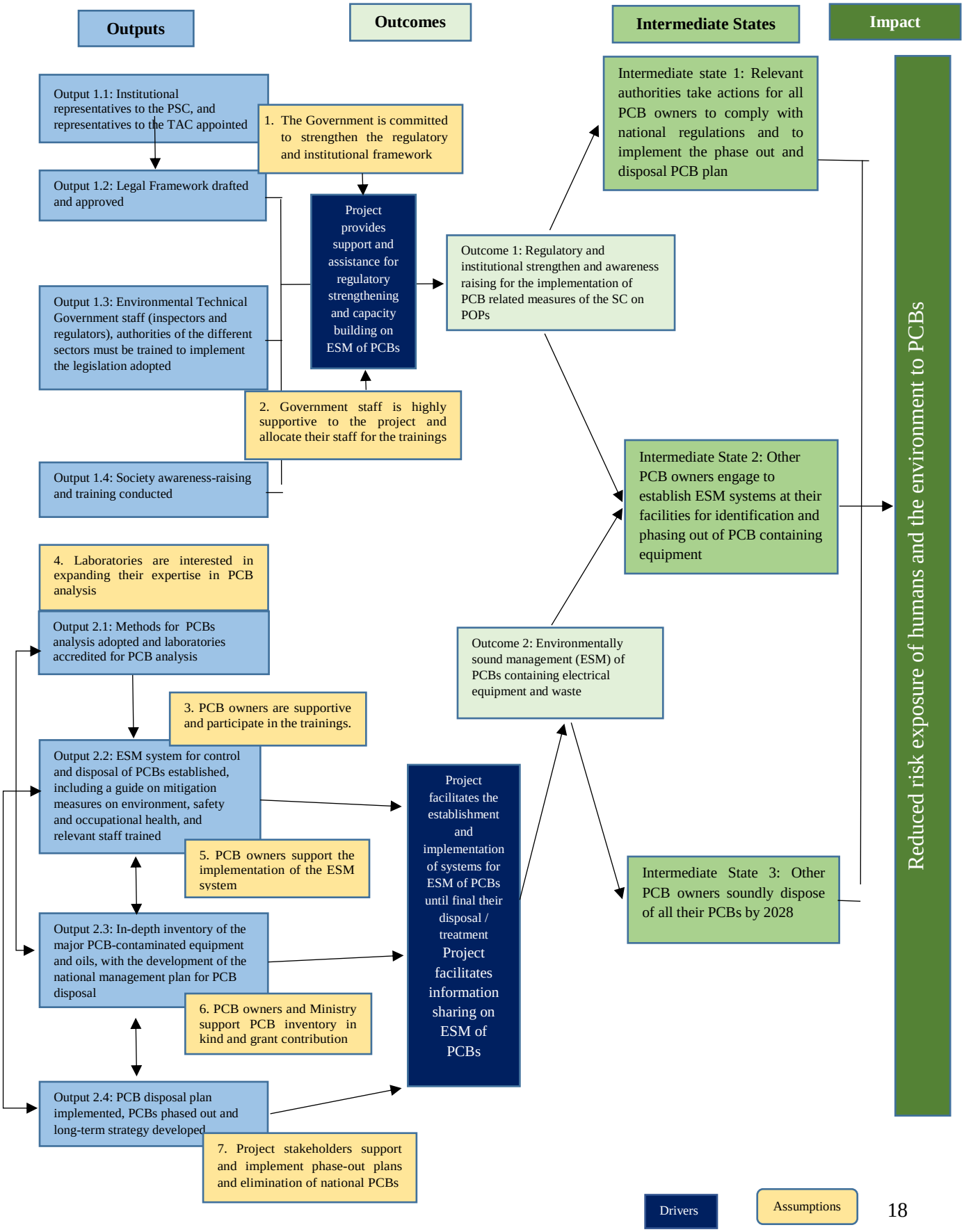
### 2.4 Theory of Change

Theory of change (TOC) is a methodology or management tool that explains the process of change by outlining causal linkages in the initiative (its shorter-term, intermediate, and longer-term outcomes).

The eight outputs and the two outcomes included in the TOC are those initially proposed in the project document. On the other hand, the figure presents three intermediate states that indicate progress to longer-term impact. First, it is anticipated that once the legislation has been strengthened, the MOEW will take action to monitor the new regulation compliance and promote ESM of PCBs (Intermediate State 1). According to the legislative framework and once the ESM of PCBs' national strategy has been implemented, other PCB owners establish ESM systems at their facilities to identify and phase out PCB-containing equipment (Intermediate State 2). Finally, under the National Disposal Plan, other PCB owners will soundly dispose of all their PCBs by 2028 (Intermediate 3).

In the medium-to-long term, it is expected to reduce the risks of PCB exposure to the environment and human health. (Impact statement). Seven key assumptions have been proposed in the TOC, and they relate to the government's commitment and active participation to strengthen/build national capacities; PCB owners' participation, ESM adoption and collaboration for inventory and disposal, and support of all stakeholders, including, for example, national laboratories. Three important drivers identified by the evaluation relate to the project: support and assistance for regulatory strengthening and capacity building, facilitate the establishment and implementation of systems for ESM of PCBs, and facilitate information sharing on ESM of PCBs.

## FIGURE 1: THEORY OF CHANGE



## 3. Project's contribution to Development Results – Effectiveness and likelihood of Impact

### 3.1 Project's achieved results and overall effectiveness

To meet the objective of the project, forty-four activities were planned[7] to deliver nine outputs that would contribute to three substantive outcomes. The assessment of the delivery of outputs as well as achievement of outcomes and project objective was based on their indicators proposed in the Project Results Framework[8], indicators description in the last Project Implementation Reports[9] and overall effectiveness assessment tool. The scale used for rating ranges from Highly Satisfactory (HS) to Highly Unsatisfactory (HU)[10].

#### 3.1.1 Delivery of outputs

In general, the project has performed **Moderately Satisfactorily (MS) in terms of delivery outputs**; Table 1 shows each output indicator and targets, the results reached and the effectiveness satisfaction rate. To calculate the general achievement of outputs, the ratings have been converted to scores. Then the average score for all the outputs have been calculated and reconverted to a rating again. From nine outputs; two have been rated HS, six outputs have been rated S and one output has been rated MU. The following paragraphs describe each output effectiveness, some positive and negative factors for those results and the quality perception.

In **Component 1, the Output 1.1 PSC and TAC** appointed; had a **Satisfactory** performance rate and complied with all indicators targets; one positive factor was that the PSC and TAC had a norm that specified the members, responsibilities and products. However, government elections, an unstable political environment, and ministries authority's rotation affected the committee approvals and revisions because the new members needed to learn the project background. In this context, PSC delayed the decision-making and affected some project outputs.

**Output 1.2 Legal Framework for PCB** management obtained a **Satisfactory** rate; the Ministerial resolution 727: "ESM for PCBs General Regulations" was approved. One positive factor was that the new regulation was applied under Environmental and waste management laws approved before the project (Law 1333 and 755). The resolution has a high technical quality regarding the ESM of PCBs, and the contribution to complying with the SC is significant. However, the new regulation was partially socialized, and there is no clear route map for tracking the implementation; some stakeholders perceived the regulation as "not compulsory".

**Output 1.3 Environmental staff and authorities trained** to implement the legislation adopted is rated as **Moderately Satisfactory.** The project carried out training related to international law, SC, Rotterdam, Basel Convention and Bolivian legislation between 2017 to 2021. In 2022, the NC sent

[7] 5646_Workplan 2017-2019 approved by PSC
[8] Annex B. Project Logical Framework
[9] Annex C. Project Implementation Report until June 2022, Table: Targeted results and progress to-date.
[10] HS: highly satisfactory=6; S: satisfactory=5; MS: moderately satisfactory=4; MU: moderately unsatisfactory=3; U: unsatisfactory=2; and HU: highly unsatisfactory=1.

the approved regulation to authorities at the national, departmental, and municipal levels and other stakeholders; now, they are responsible for disseminating the information. The participants are satisfied with the capacity-building activities. The NC repeated the training several times due to the staff rotation, especially at the management and operational level.

**Output 1.4 Societal and workers' awareness** campaigns and training obtained a **Satisfactory** rating. The PMU implemented training, awareness campaigns with NGOs and activities with universities. Interviewees working at the operative level in PCB owner's companies identify output 1.4 as one of the most important project benefits because if the decision-makers are aware of PCB risks, they will support the implementation of the ESM for PCB (planning and resources investment). PCB owners (especially the small ones) consider that the awareness training and materials positively affect the workers; for example, they are more careful about personal protective clothing and to apply qualitative tests in transformers before handling. Stakeholders such "Obrero Hospital" were benefited from the awareness output because they did not know about the high-level risk that the hospital, staff and patients ran for old and PCB-contaminated transformers. On the other hand, some participants think that the project extensions and structural barriers (political and organisational) dissolved the impact of awareness activities. Finally, the inclusion of civil society, women, indigenous groups, and children needed to be more evident in the materials and activities.

For **Component 2, Output 2.1. Methods of PCB analysis adopted and laboratories accredited**, the effectiveness rate is **Moderately Satisfactory**. The PCB owners used the qualitative and semi-quantitative analysis equipment provided by the project, and the staff was trained; these activities contributed to the project inventory; sadly, the staff rotation weakened the training benefits because, in many cases, the people who were trained left the organisation. On the other hand, the output could not reach the target because although the project made significant efforts, no national laboratory obtained the PCB analysis certification and accreditation. The laboratories perceived that the demand for this service was low compared to the investment required. At some point, one university laboratory was interested, but they were looking for financial support to buy the necessary equipment, on the contrary, the project was looking to invest in capacity building and obtain accreditation and certifications. Not having a certificated and accredited laboratory in Bolivia for PCB analysis; makes the National ESM Strategy implementation more challenging because the companies need easy access to the service, and the analysis costs increase representatively.

**Output 2.2 related to the ESM system for control and disposal of PCBs established** has **Highly-Satisfactory** rate; the ESM of PCB manuals and guidelines are of high quality and are ready and available on the Ministry of Environment - SNIA website, the PMU organised several training initiatives at all levels 282 men and 127 women were reached; thanks to the project 15 PCB owners designed their ESM of PCBs with the project's materials.
This output reached the goal because of some positive factors: The hiring of international experts with regional knowledge in the field of PCBs, the project had a CN with more than 20 years of experience in POPs, PCBs and project management in the Bolivian public sector, the active participation of the PSC in the review of documents and the inclusion in the feedback process of

companies in the oil and electricity sector with previous experience in POPs and ESM of PCB (for example YPFB-Petrobras).

**Output 2.3. An in-depth inventory of significant owners of PCB-contaminated equipment, the national management plan for PCB disposal and an available information system.** This output was rated as **Moderately Satisfactory**. Some challenges for reaching this output were lacking a national laboratory and inventories with non-updated and incomplete basic information. After comparing the companies' inventory, sectors, years of experience and geographical coverage, it is curious to find contradictions; apparently, some PCB owners still need to declare the complete inventory. Some PCB owners as COMIBOL or DELAPAZ had PCB updated inventory before their nationalisation; some small owners were absorbed, and the new transformers' PCB contamination status was unknown. With the scope, time and resources available, the project finalised the inventory for 15 PCB owners after contaminated equipment, oil and wastes identification with qualitative (Dexsil kits and L2000 DX) and quantitative analysis (chromatography); now the PCB owners are satisfied with their PCB inventory's information quality. The PCB owners participated actively in their inventory identification; in many cases, the motivation was that the project assumed the final disposal costs.
For the national management plan for ESM of PCB and disposal, the system SINPCBS was developed; now, PCB owners can register the confirmed PCB inventory, and PRONACOPS has a tool for tracking the national information. The SINPCBS System was hosted on the Ministry of Environment website - SNIA. PCB owners mentioned that the SINPCBS system has a template similar to other ones provided by PRONACOPS; they expected to get additional tools that help to identify PCBs and not just a form for registering equipment confirmed. Stakeholders still need to determine who will be responsible for SINPCBS system management.

**Output 2.4 PCB disposal plan implemented, a long-term strategy developed and phase-out of up to 400 tones PCB.** The effectiveness rate is **Satisfactory.** 15 PCB owners developed their disposal plans and delivered the contaminated equipment agreed with the project. The project designed and approved the long-term national strategy for PCB elimination in 2021. The initial design included 400 tons for elimination; in the end, 149.6 tons were reached, which could be due to inaccurate budget allocation at the design stage.
The project contracted an experienced international firm for final disposal (TREDI); the firm has a local partner - INAMTRADES, with previous experience with POPS logistics, transportation and storage. Each PCB owner received a technical visit to assess the equipment's physical condition, the best disposal treatment and the logistics arrangements required. INAMTRADES and the PMU collected all PCB inventory in less than three months because of the stakeholders' cooperation, communication and coordination. The project delivered 149.6 Tons of PCBs to the contracted firm for final disposal. All stakeholders are proud to participate because this is the first time the country has disposed of PCBs under international standards.

In 2022 output 2.4 had some challenges: 1. TREDI did not participate directly in all activities for equipment collection; they delegated the responsibility to INAMTRADES, and TREDI made important

decisions remotely. In the end, in the national store, there was a difference between the weight agreed in the contract and the tons collected in the national storage. TREDI France and UNIDO managed the situation and negotiated the solution; two international consultants supported the process, 2. PRONACOPS did not have previous experience and knowledge about the documentation and procedures required for the PCB local treatment and exportation, this fact delayed the processes and 3. In October 2022, protests began in Santa Cruz; the local treatment (dechlorination) and exportation were delayed.

Finally, for **Component 3, Output 3.1 Monitoring and evaluation framework**, obtained an effectiveness rate as **Satisfactory**. The M&E products complied with UNIDO and GEF technical standards and were approved at that level. The M&E framework supported the Project Manager and National Coordination for the project tracking and managing. The design included the Medium-Term Review but this was not executed due to project delays and extensions. As a challenge for reaching this output, the project had three different coordinators; in some cases, the M&E products had different quality, standards and details.

**TABLE 1. DELIVERY OF OUTPUTS**

| Output | Target/indicators | Indicator quantification | Score |
|---|---|---|---|
| Output 1.1: Institutional representatives to the PSC, and representatives to the TAC appointed | Indicator:<br># of PSC and TAC Appointed<br>Target:<br>PSC and TAC is fully appointed and working as programmed for the project implementation | 8 PSC organized with legal minutes signed<br>16 TAC organized with legal minutes signed | **S** |
| Output 1.2: Legal Framework drafted and approved | Indicator:<br># Environment policies, strategies, laws, regulations approved/enacted<br>Target:<br>Draft laws, regulations, and guidelines improved and in line with SC requirements within 1st | Ministerial resolution 727: Approval of ESM for PCBs General Regulations | **S** |
| Output 1.3. Environmental staff (inspectors and regulators), authorities of the different sectors trained to implement the legislation adopted; | Indicator:<br># of Training participants/trainees (male/female) on PCB-related regulations<br># Inspections within the framework<br>Target:<br>At least 50 local environmental inspectors and regulators trained on regulations (male/female)<br>At least 50 inspections | *282 men and 127 women trained<br>*59 inspections related to the legal framework and new regulation compliance.<br>* Partially disseminated and there is not a route map for regulation compliance tracking. | **MS** |

| | | | |
|---|---|---|---|
| Output l.4. Society awareness raising and training conducted: key activities address health and environmental risks because of the lack of appropriate handling of PCB. | Indicator<br># Training participants/trainees (male/female) from civil society, especially workers and community<br>Target:<br>*At least 2 trainings aimed at NGOs and 1 awareness-raising campaign for the general public;<br>* At least 50 participants (male/female) | *4 Training events (282 men and 127 women)<br>*9 awareness-raising campaigns with NGOs, universities, other institutions and the general public.<br>* 2 NGOs and 3 universities participated in the events, and public/private companies from the electricity, hydrocarbon and mining sectors. | **S** |
| Output 2.1. Methods of PCB analysis adopted and laboratories accredited | Indicator<br>Accredited methods Adopted<br>Laboratories accredited<br>Target<br>*All relevant methods assessed and at least one adopted<br>*One laboratory is accredited and certificated for PCB analysis | * Stakeholders were trained; qualitative and semi-quantitative methods were implemented.<br>*The project bought equipment for qualitative analysis: Kits Dexsil and semi-quantitative analysis: portable L2000 DX<br>* None laboratories accredited and certified. | **MS** |
| Output 2.2: ESM system for control and disposal of PCBs established. Technical guidelines and manuals designed and disseminated during training and other events to relevant staff. | Indicator<br>ESM strategy is available, guide is published and training plan is ready for implementation.<br>Concerned staff is trained<br>Target<br>*Approved ESM strategy is implemented. It has been discussed and approved.<br>*Relevant staff has been trained and ESM implemented into the relevant sectors | *The ESM Plan and Strategy were developed and ready for implementation.<br>There were prepared guides, bulletins and manuals:<br>5 Technical Guidelines<br>3 informative bulletins<br>2 manuals.<br>*282 men and 127 women trained | **HS** |
| Output 2.3. In-depth inventory of major owners (and all potential) of PCB-contaminated equipment and development of the national management plan for PCB disposal and an available information system ready. | Indicator<br>Inventory of equipment sampled, analyzed and identified<br>Information system for inventory monitoring implemented<br>Target<br>*Samples from equipment representing up to 400 tons of PCB contaminated oil and wastes are taken;<br>*National PCB inventory *Available Information system ready | *During the project, 15 PCB owners updated their PCB inventory data.<br>*The initial inventory had 1504 units as suspicious; the project analysed 272 samples with a quantitative methodology. After the chromatography analysis, 455 units were detected, with an estimated weight of 127.84 Tons. After equipment inventory was updated to 149.6 Tons for final disposal.<br>*The System SINPCBS was designed for uploading and updating the PCB national inventory. The system is on the Ministry of Environment website-SNIA. PCB owners can request a username and register their inventories.<br>*The ministry uploaded the final disposal inventory information of 15 PCB owners in the system SINPCBS. | **MS** |

| | | | |
|---|---|---|---|
| Output 2.4. PCB disposal plan implemented, PCBs phased out, and long-term strategy developed for the national elimination plan, including identification of a technically and economically feasible disposal alternative for the country SC. Phase-out of up to 400 tones | Indicator<br>Existence of a phase out plan for PCB-containing equipment;<br>Quantity of PCBs (tons) eliminated/discontinued;<br>Quantity of PCB (tons) contaminated equipment safeguarded<br>Existence of a long-term PCB phase-out strategy<br>Target<br>*A phase-out plan is ready and approved for the phase out of PCB<br>*Up to 400 tons of PCB disposed in an ESM<br>*A national long-term phase-out strategy available | *One phase-out plan for PCB-containing equipment was developed and executed.<br>*One long-term PCB phase-out strategy at the national level was designed and approved. The strategy does not include financial analysis<br>*149.6 Ton delivered for final disposal to the storage plant of the specialized international firm. There is an important gap between target and reached amounts. | **S** |
| Output 3.1<br>Monitoring and evaluation framework designed and implemented according to GEF procedures. | Indicator<br>Monitoring and evaluation reports according to the project monitoring and evaluation plan<br>Monitoring of socio-economic benefits accomplished<br>Monitoring of the project's gender dimension achieved<br>Target<br>*Existence of monitoring reports according to M&E plan<br>*Existence of evaluation reports according to M&E plan<br>*Project indicators adjusted by the management team and validated by UNIDO and project stakeholders | *One Inception Workshop was implemented in 2016<br>*Five Project Implementation Reports (PIR) and Two Progress and Annual Reports<br>*Four Annual operative Plans<br>*One Final Evaluation (In progress)<br>* One Project Final Report (In progress)<br>*Monitoring of project impact indicators | **S** |

### 3.1.2 Achievement of outcomes and project objective

The project objective and outcomes achievement assessment are based on the availability of the descriptions proposed in the GEF-Request of CEO Approval project document and the critical effectiveness analysis.

In **Outcome 1**, under the country's environmental and waste management laws a new regulation related to the ESM of PCB was approved; the regulation will support the stakeholders to continue the NIP related to POPs and PCBs 2025 and 2028 goals; the regulation's compliance monitoring was not fully improved due to regulatory institutions' resources limitations. On the other hand, the activities executed improved at all levels the stakeholders' awareness and knowledge of international standards, national regulations and PCB's main environmental and health risks. This outcome achievement is scored **Satisfactory.**

**Outcome 2.** The project proposed to address the needs and challenges for the ESM of PCBs and develop alternatives for treating and disposing of Bolivia's inventory of PCBs. This outcome achievement is rated **Moderately Satisfactory.** The ESM of PCB strategy was designed; the stakeholders were trained and had the tools for future dissemination and usage. Bolivia still has some challenges; such as technically and economically viable alternatives for PCB identification and disposal.

**Outcome 3.** UNIDO Project Manager led the M&E system execution with NC and other stakeholders' support. As a result, the system complied with UNIDO and GEF standards and supported the project execution. This outcome is rated **Satisfactory.**

The project strengthened national capacity and structures for ESM of PCBs, although some outputs were pending to achieve and other ones with significant delays. The PCB owners delivered 149.6 Tons of contaminated equipment, oil and wastes for final disposal although the original target was 400 tons. At the national framework, the project supported Bolivia in complying with the SC and protecting human health and the environment.

**Project's effectiveness rate – "Moderate Satisfactory"**

## 3.2 Progress towards impact

The key indicator for progress towards impact is the amount of PCB-contaminated equipment that has been soundly disposed of. For Bolivia, the target was 400 Ton; in the end, 149.6 Ton were treated.

### 3.2.1 Behavioural changes

As project implementation impact effect, there are some behavioural changes, broader dimensions, and intermediate states' emergence.

In the electric industry, companies generate, transport and distribute public services in a complex organizational structure. After the services nationalization processes, there are corporations, cooperatives and companies on loan stakeholders where the scopes, resources and procedures are sometimes unclear.

In general, sectorial behavioural changes appeared because although the participants have different characteristics, the project brought together the organizations for resolving a common problem related to PCB contamination and reaching the country SC goals for caring for the environment and human health. Furthermore, the project generated a positive environment for national capacity strength, collective/sectorial "self-esteem" improvement and "team-work" sense; for example, PCB owners expressed their pride for being part of the first Bolivian PCB exportation. Furthermore, they mentioned that the future seems more favourable because the project promoted stakeholder cooperation.

- **Economic perspective**

Some PCB owners began to perceive the costs related to inventory and final disposal as long-term investments to avoid future economic penalties. Before the project, the organizations invested resources on their PCB inventory equipment identification, transportation and storage. During the project, after quantitative analysis, there was an important difference between the suspicious and confirmed cases. The PCB owners realized that a significant portion of the storage probably contained contaminated equipment with a concentration lower than 50 ppm; this motivated them to find resources for taking samples for quantitative analysis to avoid investing in non-contaminated equipment.

- **Safeguarding environment – ESM of PCBs**

After project execution, PCB owners were aware of the environmental risks that contaminated equipment directly and indirectly provoked; they prioritized internal actions for ESM of PCBs plan and final disposal. For example, in ENDE, the project could not collect one big contaminated equipment; then the company began negotiating with TREDI for final disposal after the project. On the other hand, PCB owners were open to contributing to the implementation; for example, big companies shared their experience and lessons learned and other companies supported training and workshops. The project catalysed that the decision-makers and teams prioritize the advantages of discarding PCBs over bureaucratic procedures; the companies overcame administrative barriers. In the end, they made agile decisions for PCB disposal.

- **Social inclusiveness**

PCB sector managers: After the project's training or participation in the decision-making process, managers are aware of environmental and labour exposition. For example, some PCB owners mentioned being interested in making yearly blood tests to check PCB concentrations in the employees.

Workers: PCB fieldwork was demystified; before the project, some workers did not want to handle PCB equipment; in other cases, workers did not want to use personal protection equipment. After training they learned how to work with PCB materials.

Community appropriation: In Tarija, the community is aware of PCB risks, they organized a public celebration when the project collected the contaminated equipment.

### 3.2.2 Broader adoption

- Mainstreaming: The PMU, with the support of international experts, developed the first template of ESM of PCBs; national stakeholders enriched this document, and several sections were the base for the new regulation approved, now this tool is under the country Environmental and

Final waste laws. All PCB storages built after the regulation draft design comply with the international standards.

- Replication: Some PCB owners replicate the initiatives and innovations learned during the project. For example, they bought qualitative kits and are looking for resources for quantitative methods to update inventory. Furthermore, during the project, PCB owners were aware of the importance of prevention measures; now, presenting the PCB quantitative analysis is compulsory for buying a new transformer. On the other hand, after the first hospital disposed of PCB under the project, the direct stakeholders shared the experience and designed a plan for sending the information to the health system managers to replicate the ESM of PCBs in other hospitals. Finally, the project designed selection criteria to distribute the samples for quantitative analysis (year, brand, precedence, manufacturer, location, population around, water sources, etc.); now, companies with PCBs are applying the same criteria in their internal planning for ESM of PCB.
- Scale-up, the project developed and implemented the ESM of PCBs and the final disposal plan at the organization level in 15 pilots. Now the project has the design of the ESM of PCB and Final Disposal Strategy for being implemented at the national level; this is under PRONACOPS and PCBs responsibility after project finalization.

#### 3.2.3 Emergence of TOC intermediate states

Despite the project's barriers, internalities and externalities, the project's impact was significant. The project contributed to the NIP, brought together the sector for a common SC goal related to PCBs, and allowed the country to implement final disposal for the first time.

**Progress towards impact rate – "Satisfactory"**

## 4. Project's quality and performance

### 4.1 Project Design and Logical Framework.

The project design identified and addressed the main problems related to PCB contamination in Bolivia and involved stakeholders from the electrical, metallurgic and oil sectors; the design was feasible and valid. The project's logical framework is technically accurate according to UNIDO technical standards[11] The design considered similar regional experiences in Guatemala, Peru and Colombia. The project indicators were well-designed.

The project objective included eliminating 400 Tons of PCB; the inventory was calculated based on the PCB owner's information and general estimations; some companies had complete and updated data, and others still needed to generate information. For example, before nationalisation, some

[11] UNIDO Evaluation Manual - Office of Evaluation and Internal Oversight Independent Evaluation Division

companies had updated inventories, but after the process began in 2008, new small cooperatives were absorbed, and the new number of contaminated transformers was unknown[12]. On the other hand, the project lasted seven years, the logical framework was not updated officially, and minor adaptations were presented in the annual project implementation reports, for example, the Output 2.1 cancellation.

The environmental and social risks included during design were relevant. However, some risks could be better rated; for example, the "lack of interest from the public or private sector, for fear of additional obligations to eliminate equipment containing PCB" was rated as "Low". If other regional experiences and results were considered, the risk should have been rated as "Medium." The project risks analysis should have included political instability, authorities, and staff rotation.

Stakeholders gathered the design information and PCB inventory through meetings and document review (mainly information collected during NIP development). Bolivia project GEF resources for PPG assigned was USD 85.000. The Inception Workshop is essential after project design for beginning the implementation. However, in this project (although there is a document where the activity is mentioned), the workshop report is not presented; it needs to be clarified how the inception workshop strengthened and adapted the design for the implementation.

During the design and the PSC members selection, the project included several public and private organizations and the biggest PCB owners. The design would have been more acclimatized if the electrical company's nationalization process, cooperatives and small owners' view had been included in this stage.
The organisation structure was correctly designed in the Request for CEO Approval document, but the stakeholder's coordination, communication, roles and decisions making process needed to be more detailed during the Inception Report Workshop or in an additional Organisational Structure Annex.

**Project design – "Satisfactory"**

### 4.2 Relevance and Coherence

The project design and implementation are coherent with the Ministry of the Environment and Water agenda looking to reach the SC goals in 2025 and 2028. Moreover, the national environmental and waste management laws are a priority for the Ministry; the new regulation related to PCB was approved under these laws. The project relevance for UNIDO is high due to its alignment with the regional strategy and knowledge agenda. The project objective is relevant for the PCB owners because they knew that reaching final disposal was almost impossible if they worked in isolation. One evidence is that although the project was operational for seven years, the organizations continued participating. PCB owners hope to execute similar activities in the future. For maintenance

[12] Interview PCB owner DELAPAZ

centres and national laboratories, the project relevance decreased because the interests did not converge; for laboratories, the main objective was to make the analysis services profitable[13].

The issues addressed by the project are still valid, and relevant the awareness activities increased the importance of the ESM of PCBs at the strategic and management level. One challenge for the project relevance during seven years was the MOEW authorities' rotation and the project halts.

**Project relevance and coherence – "Highly-Satisfactory"**

### 4.3 Efficiency

The management of GEF funds was done according to the UNIDO internal procedures. For payments and disbursements, UNIDO ensured that all relevant documents and approvals were obtained before making requests.

GEF assigned two million dollars for the project. In the Request for CEO Approval document, the table: "Project framework" shows the budget per component: component one (legal framework and capacity building) is 10%; for component 2 (laboratory, inventory, ESM and 400 Ton final disposal), 85% and component 3 (M&E) 5%. The investment amount was administrated in monetizable and non-monetizable funds. Non-monetizable funds were approved by UNIDO and coordinated by the PMU, for example, PMU assets, staff salaries, equipment for output 2.1, international consultants' contracts, etc. Monetizable funds were disbursed to the MOEW for their administration, for example, national consultancies. Periodic financial reports were sent annually to UNIDO by PRONACOPS for approval of the next disbursement. The project disbursements generally were on time.

The NC used all project resources correctly, looking for the most effective and convenient options. International consultants and TREDI were selected and tracked by the UNIDO Project Manager; all related contracts and products are of high quality because the consultants are regional experts in PCBs and had consultancies with UNIDO in the past. A committee conformed by the CN and VMEOW selected the national consultants and PMU staff; in all cases, after product approval, the payments were disbursed.

The NC presented annual financial reports, a grand delivery report and an informative table in the PIR; the templates include the data by type. However, the financial tables did not present information per component and co-financing information.

According to the information presented in the Project Implementation Report in June 2022, the project executed USD 1,946,299 which is 97.31%.[14] The co-financing resources agreed upon was USD 9,696,435; there is no updated information about how much of this budget was executed by the partners[15]. During interviews, some PCB owners mentioned investments in inventory, storage, staff training and protection implements, and new transformers acquisitions.

[13] Interview National Coordination
[14] On December 31, on the UNIDO website, presents that the project executed USD $1,954,805, 98% of the total funds.
[15] In 2020 was the last time the project requested the information but due to COVID delays and externalities the information was not updated.

The project was approved in 2014; the actual implementation began in 2015. In 2016, the project hired the first National Coordinator; because of a lack of agreements, the project could not start. In 2017, the implementation started with a second National Coordinator, then MOEW requested the Coordinator change, and in 2018 a new Coordinator started. Finally, the second coordinator returned in 2019 and worked until the project ended.

Three extensions were approved:

- Until 2019, because the project started late and the PMU conformation took longer, the MOEW made observations about project administration. The complete project setup had several bottlenecks. The country was politically unstable for government and authorities' changes.
- Extension until 2021 because the MOEW requested the National Coordinator change; the project did not have an NC for eight months. PRONACOPS could not continue with the work plan due to a lack of staff and political intervention; at some point, the PMU did not have staff. UNIDO did not disburse funds for delays in the project report.
- Extension until March 2022 due to COVID restrictions, activities duplication, delays with PCB inventory and national instability. At the beginning of 2022, the project's new closure date was in December due to the time required for technical arrangements for PCB collection and final disposal processes. PCB local treatment and exportation will not be finalized in 2022 because PRONACOPS could not obtain the certifications and permissions required; and in Santa Cruz city, where the PCB storage is located, a general strike began in October.

During the project extensions, the operative efficiency was affected by the delays and stakeholder fatigue; in many cases, the activities were duplicated due to staff changes. Sometimes the public sector needed to use the products and resources efficiently; for example, although the new regulation template was ready for review after a consultancy hired by the second coordinator, PRONACOPS hired a second legal consultant for the same product. All stakeholders mentioned that the project should be at most three years. Annexe D includes an efficiency analysis per output.

On the other hand, the project purchased tools for desk and fieldwork (for example, semi-quantitative analysis equipment, laptops, etc.). When the purchases were under PMU's responsibility, the storage and accountability were clear; for this reason, they decided to put these properties under public responsibility after the project's finalization.

Although the project budget was executed, there is an important gap between the number of tons expected (400 tons) and the number reached (149.6 tons); there is no financial analysis about how much each tons / equipment cost during inventory and final disposal processes; it is not clear if the initial budget was underestimated.

**Project efficiency – "Moderately-Satisfactory"**

### 4.4 Sustainability

Sustainability is understood as the likelihood of continued benefits after the project ends. Sustainability is assessed in terms of the risks confronting the project; the higher the risks, the lower

the likelihood of sustenance of project benefits. There are four dimensions or aspects of risks to sustainability[16].

### 4.4.1 Financial risks

The project was able to diversify funding resources because the PCB owners were interested in updating their inventories and final disposal. Although many did not have a co-financing agreement, they invested in storage, qualitative and quantitative tests, human resources, new transformers, etc.

The technical staff want to continue with the ESM implementation and update inventory. Currently, those responsible are designing plans and proposals for getting internal resources. PCB owners said that they do not have resources for local treatment and exportation individually[17]; they hope to have a similar project or government support in the future; otherwise, the resources will only cover qualitative and semi-quantitative analysis. Small PCB owners or organizations not in the electrical, mining or oil sector, such as hospitals, are in a more critical situation.

PRONACOPS invested their resources as the national counterpart for the project execution, but the investment in human resources in some cases could be higher. After the project, the VOEW still needs a work plan or budget for continuing the activities.

The project gave the following products for future usage: new regulation approved, ESM strategy, Final disposal strategy, ESM Technical Manuals, guidelines and materials, SINPCBS information system, updated inventory with PCB disposal in 15 companies, and qualitative and semi-qualitative analysis equipment. Financial Sustainability is rated as **Moderately Likely (ML).**

### 4.4.2 Socio-political risks

PRONACOPS has been leading the National Implementation Plan for POPs. The country has been implementing national and regional projects with GEF funds in coordination with UNIDO. After the project, the government has a national strategy for the ESM of PCBs, a nationwide inventory, and an information system called SINPCBS. During the implementation, PRONACOPS participation was limited by the resources and staff, and the NC was more empowered with processes and other stakeholders' interaction.

PCB owners know the importance of ESM of PCB implementation and final disposal, especially at the managers' level; this fact and new regulation ensure the continuity of their participation. In addition,

[16] The overall sustainability is assessed using a four-point scale: Likely (L). There is little or no risks to sustainability; Moderately Likely (ML). There are moderate risks to sustainability; Moderately Unlikely (MU). There are significant risks to sustainability; Unlikely (U). There are severe risks to sustainability; Unable to Assess (UA). Unable to assess the expected incidence and magnitude of risks to sustainability.

[17] YPFB Corporation tried to export PCB in the past, but due to high costs and lack of interested partners, they suspended that plan; during the interview, YPFB said they believe that just working as a group with an external partner, this process would be carried out financially in the future.

other PCB sector stakeholders, such as health system units and communities, participated in the project, but the project scope was limited compared to the national level. In general, there are no high socio-political risks that could affect the sustainability of the outcomes; the points to be treated are related to the available funds. Socio-political Sustainability is rated as **Likely (L).**

### 4.4.3 Institutional framework and governance risks

Bolivia signed and ratified the Stockholm Convention under the MOEW leadership in 2005; the government created the National Program of POPs (PRONACOPS) as the technical unit in charge of complying with the technical agreements assumed by the country. In addition, Bolivia approved the Environmental and waste management laws; under both of them, the new regulation for ESM of PCBs was approved in 2021. Through the agreements signed, the operational structures and the actions taken, it is clear that Bolivia has the institutional and legal framework to continue with the project outcomes.

The national inventory is the most important aspect of accountability and transparency because this is linked directly to the ESM national strategy and SC compliance. Before the project, PRONACOPS had inventory estimations based on the information shared by the owners; after the project, 15 PCB owners updated their inventories and the system SINPCBS has information on the equipment collected for local treatment and final disposal.

The transparency of the contaminated PCB inventory sent by the PCB owners is part of their responsibility under Bolivian law. However, it is unclear if the companies are declaring the entire inventory; for example, a company working in the oil sector reported more equipment than an electrical company with ample coverage and more than 70 years of experience in the country. On the other hand, establishing a control system for new regulation compliance is in MOEW's hands; until October 2022, PRONACOPS still needed a clear plan and budget. Institutional framework and governance risks is rated **Moderately Likely (ML).**

### 4.4.4 Environmental risks

The project increased the national capacity building and knowledge about the ESM of PCBs and the risks to the environment and human health. In addition, the project increased PCB awareness and helped to demystify fieldwork activities with PCB.

On the other hand, although staff turnover was a negative factor for efficacy in terms of sustainability, independent of where trained people are working, at the national level, there are professionals with solid knowledge about PCBs.

After the project, 15 companies eliminated 149.6 Ton PCB equipment and oil; in some cases, they declared themselves “free of PCB” and focused on prevention measures, for example, requiring quantitative results for new transformers and maintenance centres. Other PCB owners are not free

of PCBs; they now have a plan for ESM of PCB, and many have invested in new storage and sample analysis.

An additional positive factor is that in the country now, there is a private company with experience in PCBs collection and transportation because INAMTRADES worked with TREDI to execute output 2.4 All factors mentioned above strengthen the national capacity for decreasing the PCB environmental risks; the rate is **Likely (L).** Socio-political and environmental risks are low, institutional framework and financial risks are moderate.

**Project sustainability– "Moderately-Likely"**

### 4.5 Gender mainstreaming

The project's socioeconomic benefits included a gender approach[18]. Output 1.4 mentioned the importance of the inclusion of workers and the communities living close to facilities dealing with PCBs, with an emphasis on women; the target was at least 100 people (male and female) directly trained and at least two awareness-raising campaigns. The description explained that gender issues would be integral to these workshops under the UNIDO Environmental Management Branch (EMB)'s Gender Strategy. (e.g., there will be gender-specific presentations and publications concerning the health effects of PCBs on women and children and gender-specific technical guidelines). Additionally, the project would propose protocols and laboratory capacity building to analyse blood and breast milk. The results could be a deciding factor in defining which populations might be at greater risk of exposure to PCBs, particularly in areas where the management of contaminated equipment has not been well handled.

At the end of the project, the indicators related to training in outputs 1.3, 1.4 and 2.2 included 409 people, 31% were women. The awareness session materials and communication tools presented PCB issues, environmental and health risks and ESM of PCBs for both genders; however, there is no women-specific approach. On the other hand, blood tests are applied to PCB workers, but none of the stakeholders mentioned this type of analysis for communities.
PIR 2017 mentioned that women and men are equals in the staff and consultancies selection process, but they prioritise women's inclusion; that year, PMU staff had 60% women.

PIR in 2018 analysed that the reason for low women participation is the lack of gender equity in the stakeholders' staff, men work in technical departments, and women work in administrative departments. Therefore, the report recommended to follow-up with the PCB owners with lower women participation to emphasise women's inclusion in training and products validation process (e.g., new regulation, national disposal plan, etc.).

The report mentioned that in the PCB sector, there is a progressive women incorporation in management and decision-making levels, but more representation is needed. Women's participation

[18] Request for CEO Approval, Section B.2 It is important to emphasized that the gender mainstreaming in UNIDO has been strengthening, seven years ago when the project was designed the approach was lighter.

is higher in the electrical sector than in the oil and mine sectors. The report mentioned that Environmental management with a gender approach represents new social responsibility where women are more involved in environmental decisions and resources management. For that year PMU staff were 50% women.

PIR 2019 mentioned that equal participation of men and women was encouraged to project stakeholders. As a result, that year, women's involvement increased. For example, the ESM of PCB feedback meeting is 70% women, Information System design 50%, and PSC 40%.
PIR 2020, 2021 and 2022 reported training indicators disaggregated by gender.
30% of the focal points of PCB owners for final evaluation interviews were women. NC, TREDI, and PRONACOPS representants are women.

**Project gender approach– "Moderately Satisfactory"**

## 5. Performance of partners

### 5.1 Donor

GEF was the main donor for the project. The funds were available, and fund transfers were timely and adequate. Rating is **Highly-Satisfactory**.

### 5.2 UNIDO

The UNIDO PM conducted field visits to the countries and monitored the achievement of results and budget execution in coordination with the UNIDO Country Office and NC. The project disbursements were sent on time after project report approvals. UNIDO PM assisted in the identification and contract of the final disposal global company; this was a key factor for the project target reached in 2022. International consultants' selection and contracts were supported by UNIDO PM based on profiles and international experience; the international consultants' participation ensured high-quality products, for example, technical guidelines in output 2.2. Due to a lack of offer, the equipment required for PCB sample analysis unavailable in the country was bought by UNIDO PM and then sent to Bolivia.

The UNIDO PM supported the project during the PSC and TAC meetings participation and facilitated the project implementation, especially in politically unstable periods. Furthermore, UNIDO showed flexibility by accepting the output 2.1 cancellation and proposing alternatives such as hiring an international laboratory for quantitative analysis. After technical analysis and PSC meetings, UNIDO approved three extensions, at no additional costs, to allow for the completion of activities.

The UNIDO PM was highly rated by national counterparts and partners in the interviews carried out by the evaluation. His negotiation and technical skills allowed him to continue the project during unstable periods, for example, when the VMOEW requested to change the NC or PRONACOPS

demanded to make decisions about budget management. Therefore, UNIDO's performance is rated **Highly Satisfactory**.

### 5.3 VMOEW - PRONACOPS

Depending on the new authorities, the work synergy was changing, but in general, the VMOEW was the political representative, and the implementation arm was PRONACOPS. During the interviews, several stakeholders mentioned that they did not have direct contact with PRONACOPS and did not know the difference between the NC and PRONACOPS; in fact, many of them assumed that the NC was part of PRONACOPS. Stakeholders who identified the difference between PRONACOPS and PMU mentioned that the unit was active. Still, it could be more supportive, especially in the last year when their role would ensure the project closure, the main product would be the national and international permissions for local treatment and exportation for final disposal; the project requested the permissions from June but until October 2022 the licenses were still pending.

The project results' sustainability depends on PRONACOPS' empowerment in some cases; sometimes, PRONACOPS left significant decisions and responsibilities to NC; for example, during the workshop in October 2022, PRONACOPS saw for the first time the system SINPCBS at the same time as other stakeholders. Many stakeholders mentioned that PRONACOPS would be more active if they had more staff and resources available. PRONACOPS participation was rated as **Moderately-Satisfactory.**

### 5.4 PCB Owners

Since the beginning, some of the biggest and more experienced PCB owners have been part of the PSC, and their participation and contribution enriched the project implementation. Since the project's beginning, CN coordinated fieldwork visits to update the PCB owners' inventories, and the companies were committed to managing them. Some PCB owners participated in the feedback of the new regulation and the ESM of PCB. PCB owners participated actively in capacity building and awareness activities; sadly, in some cases, the staff rotation dissolved the training effect; in other cases, some PCB owners decreased their participation for project delays. The companies invested their resources in PCB sample analysis, storage improvements, personnel equipment, equipment collection process, etc. In 2022 PCB owners managed internal constraints and bureaucratic barriers to delivering PCB equipment.

There were collaborative actions between PCB owners; for example, DELAPAZ provided temporary transformers to Obrero Hospital until they installed their new equipment; that way, they helped the hospital deliver contaminated transformers for final disposal. In general, the PCB owners' performance was rated as **Highly-Satisfactory.**

**Project performance partners– "Satisfactory"**

## 6. Factors facilitating or limiting the achievement of results

### 6.1 Project management and Results-based work planning

The findings indicate that the NC adopted an RBM approach to implementing the project. The indicators mentioned in the Project logical framework were used to track progress at output levels, and the updates were included in each project implementation report. In addition, there is documented evidence that, using a participatory approach, the PSC made decisions and recommendations based on information provided by the executing partners and TAC. The annual plan was updated based on the agreed changes and extensions with the project stakeholders.

Factors that affected the project management positively were

- PCB owners prioritized the project because they could not make PCB disposal isolated.
- Stakeholders were open to participating in capacity-building activities.
- Stakeholders with high-level experience that supported less experienced owners.
- Efficient resources management despite the constraints

Factors that affected the project management negatively were

- Unstable political environment – political intervention in the project
- Ministries and authorities changed, and the project awareness had to be repeated many times.
- NC changed three times; the second time due to a political request
- Local counterpart was not familiar with UNIDO standards and procedures; they wanted to replicate the public bureaucratic system in the project
- PRONACOPS disagreed with administrative arrangements such as human resources roles sometimes; the unconformity added additional barriers.

NC participated actively, and stakeholders felt supported in the critical processes such as quantitative analysis, equipment collection etc. High presence at political, strategic and operative levels. The NC's improvement opportunities were related to communication strategy implementation and gender approach management.

Following high-level technical recommendations, the PMU took adaptive and corrective measures to continue implementing and achieving targets. Therefore, the rating on Results-Based Management is Highly-Satisfactory.

**Project management– "Highly-Satisfactory"**

### 6.2 M&E, reporting

The monitoring and evaluation framework was designed and implemented according to GEF procedures, the budget was USD 100.000, and until June 2022 (PIR), the Monitoring and Evaluation component executed USD 70.691. Due to delays and extensions, the project did not execute a medium-term review.
The M&E design needs to be presented in specific documents, the project generated the products at NC and UNIDO levels. The M&E implementation included an annual report, project implementation reports and information generated based on stakeholders' requests.
The M&E component is perceived as a list of products and tools; it would be better to approach it as a system that accompanied the project during the design, planning, implementation and closure as a parallel process. There was no co-financing monitoring activity, and in the end, the information was unavailable.

**Project M&E and reporting– "Satisfactory"**

### 6.3 Stakeholder engagement and communication

Stakeholders were engaged with the project implementation. In some periods, the participation decreased due to project delays, but when the activities began, the participants were active, especially the PCB owners.
NC was the pivot of the project coordination and communication system. Thanks to the communication system, the NC solved issues and delays.

During the NC change the UNIDO Project Manager coordinator and communication with the VMOEW allowed the project to continue the execution. PRONACOPS's role was changed depending on the Vice-minister management approach; sometimes, the unique focal point of the project and others, the NC, worked directly with the Vice-minister. PRONACOPS did not have direct interaction with PCB owners.

**Project engagement and communication "Satisfactory"**

### 6.4 Overarching assessment and ratings table

| | Evaluation criteria | Rate | Main comments |
|---|---|---|---|
| A | Impact (progress toward impact) | S | The project brought together heterogeneous organizations to reach a common goal. The economic perspective has changed now ESM of PCB is a long-term investment. The project included managers (awareness) and workers (PCB fieldwork demystified) appropriation. The new regulation approved is under the country's Environmental laws. PCB owners replicate the innovations learned. |
| B | Project design | S | |
| 1 | Overall design | S | The project design identified and addressed the main problems related to PCB contamination; the design was feasible and valid. The organization structure was well designed, but the stakeholder's coordination, communication, roles and decisions making process needed to be more detailed. |
| 2 | Logframe | S | The project's logical framework is technically accurate. The environmental and social risks included during design were relevant, however, some risks could be better rated. Indicators were SMART. |
| C | Project performance | MS | |
| 1 | Relevance and Coherence | HS | The project's relevance is high due to its alignment with the UNIDO regional strategy and knowledge agenda. The project objective is relevant for PCB owners because reaching project results is only possible if they work together. The project contributes to the country for SC targets compliance. The project is coherent with the PCB management issues and gaps identified in the design and addressed in the log frames and implementation |
| 2 | Effectiveness | MS | The project strengthened the national capacity and structures for ESM of PCBs. The new PCB management regulation was approved; however, the socialization was implemented partially there is no route map for compliance monitoring. The MOEW and companies have a strategy for ESM of PCB and final disposal at the national framework (technical material for capacity building and SINPCB system). No national laboratory is certified and accredited for PCB analysis in the country. The PCB owners delivered 149.6 Tons for final disposal (original target 400 Tons). |
| 3 | Efficiency | MS | GEF funds were managed according to the UNIDO internal procedures. The project executed USD 1.946.299, 97,31% (Jun 2022). Initially, the project was approved for 36 months; the finalization date was 2018; finally, the project closed in 2022. Three extensions were approved: the first extension one because the start-up process had several delays and bottlenecks, the country had political instability and continuous authorities' changes; the second extension was due to the Ministry political intervention, they requested the NC change; the last extension was until march 2022 due to COVID restrictions, activities duplication, delays with PCB inventory and national instability. The finalization date has moved to December due to additional time required for technical arrangements for PCB disposal. During the project extensions, the operative efficiency was affected by |

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| | | | delays and stakeholder fatigue; in many cases, the activities were duplicated due to staff changes. Although the project budget was executed, there is a gap between the number of tons expected PCB disposed of tonnes (400) and the reached tonnes (149.6).<br>In Bolivia, the co-financing investment was USD 9,696,435 in the agreement letters. During the implementation, the ministry provided human resources when available; other partners mentioned they invested resources in sample analysis, updating inventory, building or repairing PCB storages, purchasing new equipment, personnel, etc. However, the co-financing information was not available. |
| 4 | Sustainability of benefits | ML | Economic risks are "Moderate Likely" due to a lack of resources for future investments from the public side and small PCB owners. Institutional framework & governance risks are "Moderate Likely" because the ministry department did not mention a plan for sustainability processes, especially regulation monitoring and capacity building; they have the project products but need to be more empowered. Finally, the Socio-political and environmental risks were classified as "Likely". |
| D | Cross-cutting performance | S | |
| 1 | Gender mainstreaming | MS | The gender approach included the concept of not discrimination during staff selection and stakeholder capacity-building. The training was open to men and women. Capacity-building activities and materials were for both genders. However, there is no apparent gender mainstreaming strategy developed for this project or materials focused on women. The women's participation in training sessions was around 30% to 40%. The stakeholders' representatives' majority were women (PRONACOPS, NC, TREDI, PCB representatives etc.).The last NC perceived gender mainstreaming as the number of women who attended the training. |
| 2 | M&E and Reporting | S | The M&E Plan followed the CEO Approval document and project log frame information. The documents mentioned the Inception Workshop, but the report was not found; how the NC used the product needs to be clarified. The monitoring and evaluation budget was USD 100.000; until June 2022 (PIR), the budget executed was USD 70.691. The M&E's main products are Annual reports, PIRs and verification tools. The project did not execute the Medium-term review due to project delays. |
| 3 | Results-based Management (RBM) | HS | The project adopted an RBM strategy for the implementation. The NC applied a participatory approach especially with the PSC and TAC, for making decisions. The annual plan was updated based on the agreed changes and extensions with the project stakeholders. NC participated actively with a high political, strategic and operative presence. The PMU took adaptive and corrective measures to continue implementing and achieving targets. |
| E | Performance of partners | S | |
| 1 | UNIDO | HS | The project disbursements were sent on time after approvals. The international consultants' participation ensured high-quality products. UNIDO selected and hired an international company for final disposal; this |

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|---|---|---|---|
| | | | support ensured that the project target was reached in 2022. In addition, the UNIDO supported and facilitated the project implementation, especially in politically unstable periods. The UNIDO PM monitored the project implementation effectively; national counterparts and partners highly rated the UNIDO PM due to his negotiation and technical skills. |
| 2 | National counterparts | MS | VMOEW led the project implementation through PRONACOPS; despite the resources and time barriers, the team coordinated with the NC. The political factor positively affected the project, for example, for new regulation approval and sometimes negatively, such as the request for NC change that ultimately delayed the project. In the long term, the project sustainability depends on the VMOEW political support and PRONACOPS resources and leadership. The project provided several tools for continuing the results and benefits. |
| 3 | Donor | HS | GEF funds available and technical parameter were determined and coordinated with UNIDO. |
| 4 | PCB Owners | HS | The biggest and more experienced PCB owners have enriched the project new regulation and technical materials with their feedback. PCB owners participated actively in capacity building and awareness activities. The companies invested their resources in PCB sample analysis, storage improvements, personnel equipment, etc.<br>Although the project extensions the PCB owners continued their active participation. In 2022 PCB owners managed internal constraints and bureaucratic barriers to delivering PCB equipment. |
| **F** | **Overall assessment** | **MS** | |

## 7. Conclusions, recommendations, lessons learned

### 7.1 Conclusions

The project brought together different participants to meet the same objective and eliminate PCBs for the first time in Bolivia. One of the main achievements was awareness of PCBs' environmental and human health risks. After the project, the resources necessary for the ESM of PCBs are perceived as an investment; behavioural changes, including preventive measures throughout the sector and demystifying fieldwork with PCBs, are also identified. The project disposed of 149.6 tons of PCBs. The project executed USD 1.946.299, 97,31% (Jun 2022).

The project was designed for three years; however, it was completed in seven years. Three extensions were approved: the first due to a delay in the project start-up process, the second for the NC change and the third due to delays in the COVID context and cumulative effects of the two previous extensions. Despite the delays, the resources were sufficient for the implementation, but there is a gap between the PCB for disposal targeted and reached (400 tons in the design and 149.6 at the end of the execution). The partners mentioned they invested resources in samples analysis, updating

inventory, building or repairing PCB storages, purchasing new equipment, personnel, etc. however, the co-financing data was unavailable.

The project developed a structure and tools to continue with the results achieved. The main products are a new regulation (it was partially socialized, and it is not clear how it will be tracked), technical tools for the ESM of PCBs, ESM and Final Disposal National Plan, methodology for updating inventories and final disposal, management information system for recording the inventory, capacity building and 15 pilots. Long-term sustainability depends on financial and government organizational structure risk management; the strategy developed did not include financial analysis. The support from UNIDO, PMU and NC and the participation of VMOEW, PRONACOPS and key stakeholders were commensurate with their available resources. The project's overall assessment is rated as "Moderately Satisfactory".

## 7.2 Recommendations

### To UNIDO

1. Include as part of the terms of reference for companies responsible for final disposal evaluation visits before equipment collection, direct accompaniment during all fieldwork activities (additionally of local partners), and identify procedures for recording and managing inventories when highly relevant data is unavailable, such as the weight of the equipment.
2. To include a participatory self-evaluation process when the project cannot execute the Mid-term review. During the self-evaluations, the efficiency and effectiveness of the inputs and outcomes are analysed, and a roadmap and action plan are developed to achieve the expected results; this exercise reinforces cooperation between stakeholders and catalyses commitment and participation.
3. Include in the Project Implementation Reports co-financing funds execution information to ensure the availability of this information for the final evaluation. Additionally, include an annual financial analysis related to inventory, storage and disposal process costs per unit (equipment/tons); this should be a performance indicator that can contribute to the tracking of the project and give information for future new projects' budget allocation design.
4. Strengthen the project start-up process. The project start-up process strengthens the implementation and identification of roles at the operational level and improves risk management; better usage of the inception workshop is recommended.
5. To include a financial assessment in the last PIR or to develop an additional document to know the final cost per PCB Ton treated and the future budget required for continuing the national disposal.
6. Identify the strengths and weaknesses of the person in charge of the National Coordination so that, in coordination with internal units/tools, new skills and knowledge are integrated, for example, a gender approach in the implementation of projects.

**To National Government:**

1. Analyse how the delivery process of public goods can be facilitated when they are contaminated with PCBs since, at the moment, the process is not defined and generates a certain level of delay in equipment collection and disposal activities.
2. Strengthen PRONACOPS through investment in financial and human resources.
3. Within the framework of the National Implementation Plan for SC compliance, the level of support and participation of the different PCB owners should be analysed depending on their characteristics. For example, some companies are from the electrical sector with a considerable number of transformers; other ones, such as hospitals, have at most four equipment, and in consequence, the resources, knowledge and approach are different.

### 7.3 Lessons Learned and Good Practices

1. Regional workshops for learning, knowledge exchange and identifying strategies are helpful and build collaboration between countries.
2. Access to quantitative analysis directly influences the level of participation and attitude towards the management of PCBs by owners; for example, changes in perception when, after analysing the inventory, the level of suspicious equipment is much lower than confirmed cases.
3. PCB owners may find additional challenges for waste management when there are initial nationalisation processes, especially when there is no clear identification of equipment ownership; the same happens when there are complex structures such as sectoral corporations.
4. The storage assessment visits before the PCB equipment collection processes were extremely productive since they identified the logistical requirements for the procedure, missing information and identification of the equipment's physical state; this permitted the identification of the best treatment and disposal strategy.
5. In the country, when an organization buys or maintains a transformer, now they request a PCB negative test before buying or treatment; this strengthens the importance of avoiding cross-contamination.

## ANNEX A: LISTS OF DOCUMENTATION CONSULTED, INTERVIEWS PARTICIPANTS AND SURVEY RESPONDANTS

### 1. List of documentation consulted

- GEF – Request for CEO Approval Report
- Terms Of Reference For The Provision Of Services Related To The Project In Bolivia UNIDO Project ID: 140297
- Inception Workshop reports
- National coordination and technical meeting reports
- Minutes of project steering committee meetings
- Project Implementation Review reports (PIRs) and accompanying annexes
- Progress and annual reports
- Reports of consultants (national and international)/contractors
- Financial as well as Co-financial Project Reports
- National Financial as well as Co-financial Reports
- Guidance documents developed on ESM of PCBs as well as management plans
- Training and awareness raising workshop reports including list of participants (gender wise)
- Copies of tools and communications materials/ documentations developed for workshops
- Annual work plans
- Government regulation approved
- Project extension letters
- Workshop materials and field work visit: "International ESM for PCB Management Training and ONUDI Project in Bolivia"

### 2. List of key stakeholders interviewed

- UNIDO project manager
- PRONACOPS Coordinator
- PRONACOPS Officer
- SINPCBS System programmer – Ministry of Environment and Water Systems Department
- National Coordinator
- PMU Officer
- PCB Owners – Corporations of electricity and oil sectors, companies and small owners (10 representants)
- Obrero Hospital Staff and part of the "Caja Nacional" a public social security health system.
- TREDI and INAMTRADES Representants and Staff

### 3. List of stakeholders who filled out the evaluation virtual survey – 12 respondents

- International and National Consultants
- PCB owners
- Private sector involved in the project
- Academia

## ANNEX B: PROJECT LOGICAL FRAMEWORK

| Interventions | Indicators | Baseline | Target | Sources of Verification | Assumptions |
|---|---|---|---|---|---|
| **Project Objective** | **To strengthen national capacities for the environmentally sound management (ESM) of PCBs, including disposal of up to 400 tons of PCB and related wastes and reduction / elimination of PCB releases from serviced electrical equipment at workshops and interim storage locations, to avoid cross contamination of electrical equipment and to protect human health and the environment.** | | | | |
| **Component 1** | **Regulatory and institutional strengthening and awareness raising for the implementation of PCB related measures of the SC on POPs** | | | | |
| **Output 1.1**<br><br>**Institutional representatives to the Project Steering Committee appointed, by the Authorities of Ministries and relevant Institutions** | # of Steering Committee Members appointed | Project Steering Committee in Bolivia is being integrated. | Steering Committee is fully appointed within the first three months of project implementation | Letters of appointment and meeting Minutes. | The Government of Bolivia is committed to strengthen the regulatory and institutional framework in line with the requirements under the Stockholm Convention on POPs.<br>Change of Officers and lack of commitment.<br>Slow process.<br>Lack of commitment.<br>Changes to technical level within the government infrastructure.<br>Government staff is highly supportive to the project and allocate their staff for the trainings.<br>PCB owners are also supportive to the project and participate in large number at the trainings. |
| **Representatives to the Technical Committee appointed** | # of Representatives to the Technical Committee appointed | Technical Committee has been agreed upon but representatives to it need to be selected and appointed | Representatives to the Technical Committee are fully appointed within the first three months of project implementation | Letters of appointment and meeting minutes | |
| **Output 1.2**<br>**Legal Framework drafted for adoption** | # of environment policies, strategies, laws, regulation approved/enacted | Lack of existing laws, regulations and official guidelines on PCBs in Bolivia. | Laws, regulations, guidelines drafted/improved and in line with SC requirements | Project proposal documents<br>Records of discussions / approvals Official gazette | |

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|---|---|---|---|---|---|
| **Output 1.3**<br>**Environmental Technical Government staff (inspectors and regulators), authorities of the different sectors must be trained to implement the legislation adopted** | # of training participants/trainees (male/female) on PCB related regulations for Environmental Inspectors and relevant technical staff;<br><br># of staff trained on how to mitigate human and environmental exposure risks of PCBs;<br><br># of inspections within the legislation framework of conducted. | Lack of knowledge on PCB related legislation among environmental technical governmental staff and relevant technical authorities | 4 targeted workshops<br><br>At least 20 local environmental inspectors and regulators trained on regulations (male/female)<br><br>At least 20 staff trained on risk mitigation (male/female)<br><br>At least 20 inspections conducted | Records of training sesions minutes and participants list (male/female)<br><br>Inspection reports available | |
| **Output 1.4**<br>**Training and awareness of the society.** | # of training participants/trainees (male/female) from civil society, especially workers and community people. | Lack of knowledge on PCB management and risks associated with environment and human health | At least 2 trainings and awareness raising campaigns;<br><br>At least 80 participants (male/female) | Copy of meeting minutes and participants list male/female) | |
| **Component 2** | **Environmentally sound management (ESM) of PCB-containing electrical equipment and waste** | | | | |
| **Output 2.1**<br>**Methods for PCBs analysis adopted and laboratories accredited for PCB analysis.** | # accredited methods adopted<br><br># of laboratories accredited | There are no laboratories certified by the Competent Authority in this parameter; accreditation process is very long. | All relevant methods assessed and at least one adopted<br><br>At least one laboratory is accredited for PCB analysis. | Supporting documents of adopted method<br><br>Copy of accreditation certificate. | Laboratories are interested in expanding their expertise in PCB analysis. |
| **Output 2.2**<br>**ESM system for the use and disposal of PCBs including mitigation measures in environment, safety and occupational health available. All this published in a guide and ready for implementation. Relevant staff trained.** | ESM strategy is available, guide is published and training plan is ready for implementation. Concerned staff is trained . | There is no PCB analysis for equipment in service.<br><br>Lack of separate working procedures for PCB positive and PCB free equipment, which allows for cross-contamination of PCB free equipment. | Approved ESM strategy is available. It has been discussed, approved and distributed to relevant sectors, and is ready to be applied.<br><br>At least 5 relevant staff is trained | Copy of meeting minutes of the approval of the ESM system<br><br>Copy of the ESM guidelines<br><br>Records of training and list (male/female) | PCB owners will strongly support the implementation of the ESM system as their environmental compliance and occupational safety standards will improve. |

| | | | | | |
|---|---|---|---|---|---|
| **Output 2.3**<br>**Establishment of in-depth inventory of the major owners of contaminated equipment and development of the national management plan for PCB disposal** | # of equipment sampled and measured<br><br># of inventory reports | An up-to-date, reliable national PCB inventory is missing | Samples from equipment representing at least 400 tons of PCB contaminated oil and wastes are taken;<br><br>National PCB inventory (covering at least 400 tons) available | Technical and sampling reports available | PCB owners and ministry is supportive of the PCB inventory and will support with in-kind and grant contribution. |
| **Output 2.4**<br>**PCB disposal plan developed, PCBs phased out and long-term strategy developed.** | Existence of a phase out plan for PCB-containing equipment;<br><br>Quantity of PCBs (tons) eliminated/discontinued;<br><br>Existence of a long-term PCB phase-out strategy | Phase out plan for PCB disposal is missing;<br><br>400 tons of PCB are waiting to be disposed of in an environmentally sound manner<br><br>No long-term PCB strategy available | A phase-out plan is ready and approved for the phase out of PCB (in-use and already phased-out equipment);<br><br>At least 400 tons of PCB disposed of in an environmentally sound manner<br><br>A national long-term phase-out strategy available | Copy of approved phase-out plan.<br><br>Technical documentation of PCB phase-out<br><br>Copy of long-term phase-out plan | Project stakeholders strongly support and expeditiously implement the concept of developing phase-out plans and elimination of national PCBs |
| **Component 3** | **Project management and monitoring and evaluation** | | | | |
| **Output 3.1. Monitoring and evaluation framework designed and implemented according to GEF procedures** | Monitoring and evaluation reports according to the project monitoring and evaluation plan<br><br>Monitoring of socio-economic benefits accomplished<br><br>Monitoring of the project's gender dimension achieved | M&E not available yet<br><br>Monitoring of socio-economic benefits not available<br><br>Monitoring of gender dimensions not available | Existence of monitoring reports according to M&E plan<br><br>Existence of evaluation reports according to M&E plan<br><br>Project indicators adjusted by management team and validated by UNIDO and project stakeholders | Management and monitoring and evaluation teams established in due time and working effectively. | |

**ANNEX C. EFFICIENCY ANALYSIS PER OUTPUT**

**TABLE 2. OUTPUTS PLANIFICATION VERSUS IMPLEMENTATION – EFFICIENCY RATES**

| Component/Outcome/ Output | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Rate |
|---|---|---|---|---|---|---|---|
| Component I. Regulatory and institutional strengthening and awareness raising for the implementation of PCB | | | | | | | 92.75% |
| Outcome I. (GEF: US$ 200,000; co-finance: US$ 1,000,000) Regulatory and institutional capacities for | | | | | | | |
| Output 1.1. PSC and Technical Committee | | | | | | | 100% |
| Output l.2. Legal framework drafted | | Duplication activities | Proposal was not approved | CN presents the first draft to the national counterparts | Regulation approved | Regulation socializated | 77% |
| Output 1.3. Environmental staff authorities of the different sectors trained to implement the legislation adopted | | | | COVID | | | 94% |
| Output l.4. Society awareness raising and | | | | | | | 100% |

| Component/Outcome/ Output | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Rate |
|---|---|---|---|---|---|---|---|
| Component 2. (EMS) of PCB-containing electrical equipment and waste | | | | | | | 70.25% |
| Outcome 2. (GEF: US$ 1,550,000; co-finance: US$ 3,715,000) Environmental management system (ESM) established. | | | | | | | |
| Output 2.1. Methods of PCB analysis adopted and laboratories accredited | | Laboratories do not have capacity The project bought the qualitative analysis equipment | No laboratory founded - output is cancelled. | Qualitative analysis equipment is available | MARCONI analized the project's samples for chormatography | | 61% |
| Output 2.2: ESM system for control and disposal of PCBs established. Technical guidelines and manuals designed and disseminated during training and other events to relevant staff. | | | | Approval delays | Approval delays | | 88% |
| Output 2.3. In-depth inventory of major owners (and all potential) of PCB-contaminated equipment and development of the national management plan for PCB disposal. An information system will include data collected during the inventory | Inventory tool and trainings | Qualitative and semi-quantitative analysis. Inventories updating | No advance output 2.1 | No advance output 2.1 and not defined PCB system | MARCONI analized 273 samples. Project updated inventory | Inventory updated SINPCBS is ready and has one training | 77% |

| Component/Outcome/ Output | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Rate |
|---|---|---|---|---|---|---|---|
| Output 2.4. PCB disposal plan implemented (for project duration), PCBs phased out, and long-term strategy developed (based on project results)<br>Phase-out of up to 400 tones for the appropriate elimination /treatment | | | | There is a plan for 12 firms disposal but it was not possible the implementation for delays in 2.1, 2.3 | The selection of final disposal firm is delayed just at the end of the year TOR ready and selection process began | Project final extension. All PCB disposal equipment and oils are stored in Santa Cruz. Local treatment and exportation did not start yet due to local protests and some delays in getting the required permissions | 55% |
| Component 3. Project management, monitoring and evaluation. | | | | | | | |
| Outcome 3 (GEF: US$ 100,000; co-finance US$ 175,000) | | | | | | | |
| Output 3.1 Monitoring and evaluation framework designed and implemented according to GEF procedures. | | Project without Coordinator for almost 8 months New NC hired on October | General project delay, extension approved | | | | 83% |

Green: No or minor delays
Yellow: Important delays are affected for other outputs
Red: Delays that affected the project implementation and are connected with extensions

| Component/Outcome/ Output | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Comments |
|---|---|---|---|---|---|---|---|
| Component I. Regulatory and institutional strengthening and awareness raising for the implementation of PCB related measures of the SC on POPs | | | | | | | |
| Outcome I. (GEF: US$ 200,000; co-finance: US$ 1,000,000) Regulatory and institutional capacities for environmentally sound management of PCBs strengthened | | | | | | | |
| Output 1.1. PSC and Technical Committee appointed; high level representatives of the main stakeholders. | | | | | | | The members' rotation affected the PSC and TAC efficiency; for example, the new regulation required three years to approve. |
| Output l.2. Legal framework drafted; Under a participatory process with the main stakeholders and the necessary review by the legal departments. | | Duplication activities | Proposal was not approved | CN presents the first draft to the national counterparts | Regulation approved | Regulation socializated | In 2018 the project did not have NC for eight months; PRONACOPS assumed the implementation, and some resources could be invested more efficiently, for example in 2017, the project funded a legal consultant for a new regulation design; PRONACOPS decided to hire a new consultant for the same product and duplicated activities, there was no advance in this second design. |
| Output 1.3. Environmental staff (inspectors and regulators), authorities of the different sectors trained to implement the legislation adopted; | | | | COVID | | | Although the project repeated the training for staff rotation several times, the national knowledge about PCB reached a more extensive scope indirectly and without intention.The additional resources investment was positive. |
| Output l.4. Society awareness raising and training conducted: key activities address health and environmental risks because the lack of appropriate handling of PCB. | | | | | | | The project resources were invested most of the time efficiently. For example, with the same resources, the project executed different training that included contents of outputs 1.3, 1.4 and 2.2.<br>On the other hand, sometimes the products could be used more; for example, the project had a Communications Strategy and hired two consultants; the PMU only implemented part of the plan and focused on printed materials as bulletins. |

| Component/Outcome/ Output | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Comments |
|---|---|---|---|---|---|---|---|
| Component 2. (EMS) of PCB-containing electrical equipment and waste | | | | | | | |
| Outcome 2. (GEF: US$ 1,550,000; co-finance: US$ 3,715,000) Environmental management system (ESM) of PCBs established. | | | | | | | |
| Output 2.1. Methods of PCB analysis adopted and laboratories accredited | | Laboratories do not have capacity The project bought the qualitative analysis equipment | No laboratory founded - output is cancelled. | Qualitative analysis equipment is available | MARCONI analized the project's samples for chormatogr aphy | | The resources invested in this output did not have any results due to the lack of interest of private laboratories. |
| Output 2.2: ESM system for control and disposal of PCBs established. Technical guidelines and manuals designed and disseminated during training and other events to relevant staff. | | | | Approval delays | Approval delays | | High-quality products were approved, and the time required for approval and feedback was long due to the authorities' rotation. |
| Output 2.3. In-depth inventory of major owners (and all potential) of PCB-contaminated equipment and development of the national management plan for PCB disposal. An information system will include data collected during the inventory to facilitate continuous updating. | Inventory tool and trainings | Qualitative and semi-quantitative analysis. Inventories updating | No advance output 2.1 | No advance output 2.1 and not defined PCB system | MARCONI analized 273 samples. Project updated inventory | Inventory updated SINPCBS is ready and has one training | The project bought qualitative and semi-quantitative equipment for national inventory design. The PMU and PRONACOPS in coordination with 18 PCB owners used the equipment. Additionally, PCB owners invested in this output. The cost per confirmed case that entered in final disposal process is not clear. The MIS did not required major investment the PCB owners do not use the tool yet. |
| Output 2.4. PCB disposal plan implemented (for project duration), PCBs phased out, and long-term strategy developed (based on project results) Phase-out of up to 400 tones for the appropriate elimination /treatment t | | | | There is a plan for 12 firms disposal but it was not possible the implementation for delays in 2.1, 2.3 | The selection of final disposal firm is delayed just at the end of the year TOR ready and selection process began | Project final extension. All PCB disposal equipment and oils are stored in Santa Cruz. Local treatment and exportation did not start yet due to local protests and some delays in getting the required permissions | Although the activities were delayed, in 2022 the time and resources were invested, and the project signed a contract with an internationally experienced company. PCB owners participated actively and invested additional resources. |

| Component/Outcome/ Output | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Comments |
|---|---|---|---|---|---|---|---|
| Component 3. Project management, monitoring and evaluation. | | | | | | | |
| Outcome 3 (GEF: US$ 100,000; co-finance US$ 175,000) | | | | | | | |
| Output 3.1 Monitoring and evaluation framework designed and implemented according to GEF procedures. | | Project without Coordinator for almost 8 months New NC hired on October | General project delay, extension approved | | | | The project invested in the M&E plan |
| | | | | | | | |
| Green: No or minor delays | | | | | | | |
| Yellow: Important delays are affected for other outputs | | | | | | | |
| Red: Delays that affected the project implementation and are connected with extensions | | | | | | | |

## ANNEX D. EVALUATION FRAMEWORK

| Evaluation criteria | Evaluation indicators | Means of verification |
|---|---|---|
| **Project Design** | | |
| The evaluation will examine the extent to which:<br>• The project's design is adequate to address the problems at hand.<br>• The project has a clear thematically-focused development objective, the attainment of which can be determined by a set of verifiable indicators.<br>• The project was formulated based on the logical framework (project results framework) approach.<br>• Was there a need to reformulate the project design and the project results framework given changes in the countries and operational context?<br>• Is inventory data (conducted during the preparatory phase) included in the project document based on remote inventory, physical inventory or estimates?<br>• Are relevant environmental and social risk considerations included at the time of project design? | • Situational analysis<br>• Project results framework<br>• Risk assessment and management<br>• Adjustments made due to operational context<br>• Environmental and social safeguards | • Project document and annexes<br>• Interviews with UNIDO, National Focal Points, key national partners, and other project stakeholders |
| **Relevance and Coherence** | | |
| The evaluation will examine the extent to which the project is relevant or coherent to the:<br>• National development and environmental priorities, national implementation plans and strategies of the national governments and their populations, as well as regional and international agreements. | • Level of alignment with regional, sub-regional, and national environmental priorities, NIP, as well as with UNIDO and GEF | • Pertinent project documents and annexes<br>• Interviews with UNIDO, national |

| Evaluation criteria | Evaluation indicators | Means of verification |
|---|---|---|
| • Target groups: relevance of the project's objectives, outcomes, and outputs to the different target groups of the interventions (e.g., national governments, municipalities, NGOs, women's associations, waste pickers, etc.).<br>• GEF's focal areas/operational program strategies: In retrospect, were the project's outcomes consistent with the GEF focal area(s)/ operational program strategies? Ascertain the likely nature and significance of the contribution of the project outcomes in the reduction or elimination of releases of uPOPs from open burning<br>• Does the project remain relevant taking into account the changing environment?<br>• To what extent was the project aligned with – and complementary to – other work being delivered within the participating countries? | strategic priorities at the time of design and implementation | project coordinators, key national stakeholders |
| **Effectiveness and Progress to impact** | | |
| The evaluation will assess the objectives and current results (results to date):<br>• The evaluation will assess whether the results at various levels, including outcomes, have been achieved. In detail, the following issues will be assessed: Have the expected outputs and outcomes, been successfully achieved? What are the main reasons for the achievement/non-achievement of project objectives?<br>• Are the project outcomes commensurate with the original or modified project objectives? If the original or modified expected results are merely outputs/inputs, were there any real outcomes of the project? If there were, are these commensurate with realistic expectations from the project?<br>• Are the targeted beneficiary groups actually being reached? How do the stakeholders perceive the quality of outputs?<br>• Has the project generated any results that could lead to changes of the assisted institutions? Have there been any unplanned effects?<br>• Identify actual and/or potential longer-term impacts or at least indicate the steps taken to assess these.<br>• Have the relevant authorities in the countries prepared and enforced the regulations on PCBs?<br>• What is the geographical coverage of the project?<br>• What quantity of PCBs have been identified? And disposed off?<br>• Have any spillages been observed or reported?<br>• Does a certified laboratory for testing of PCB-oil exist in the country?<br>• Will the participating countries continue with PCB disposal?<br>• Has the project provided information on POPs, including PCBs, to educational institutions (schools, colleges, universities, …)? | • Target for outputs, outcomes, and objectives of Project Results Framework<br>• Occurrence of intermediate states in the participating countries<br>• Stated contribution of stakeholders in achievement of outputs | • Review of relevant documents such as PIRs, progress reports, meeting reports<br>• Direct observation and discussion during evaluation mission<br>• Interviews with UNIDO, NPCs, National Focal Points, key government representatives, consultants and other partners such as NGOs, academia, etc. |
| **Efficiency at current stage of implementation** | | |

| Evaluation criteria | Evaluation indicators | Means of verification |
|---|---|---|
| The extent to which:<br>• The project cost is effective? Has the project used the most cost-efficient options?<br>• Has the project produced results (outputs and outcomes) within the expected time frame? Has project implementation been delayed? If the project has been delayed, what were the reasons for the delay, and has it affected cost effectiveness or results?<br>• Have the project's activities been in line with the schedule of activities as defined by the project team and annual work plans? Have the disbursements and project expenditures been in line with budgets?<br>• Have the inputs from the donor, UNIDO, and government/ counterpart been provided as planned, and were they adequate to meet the requirements? Was the quality of UNIDO inputs and services as planned and timely?<br>• Have the counterpart institutions spent co-finance as initially committed?<br>• Was there coordination with other UNIDO and other donors' projects, and did possible synergy effects happen?<br>• Give the reasons/justifications for the extension granted to the project.<br>• Has a knowledge management system been established?<br>• To what extent have the recommendations of the mid-term evaluation been taken into consideration?<br>• What has been the impact of COVID-19 on project implementation? | • Level of compliance with expected milestones mentioned in logical framework and with respect to financial planning and annual plans<br>• Level of co-finance mobilized<br>• Document the delays that occurred<br>• List of reasons, validated by project team | For all questions under Efficiency:<br>• PIRs, PSC meeting reports, annual and progress reports, NPSC meeting reports, national reports<br>• Interviews with UNIDO, NPC, National Focal Points, consultants and other project stakeholders |
| **Assessment of risks to likelihood 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 organizational sustainability will be reviewed. This assessment will 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.<br><br>The following four dimensions or aspects of risks to sustainability will be addressed:<br>• ***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 now that the GEF assistance has ended? (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 the future, there will be adequate financial resources for sustaining project outcomes.) Was the project successful in leveraging the co-financing pledged at design? | UNIDO risk level indicators: Low, Moderate, High | • Review of relevant documents such as PIRs, progress reports, meeting documents, progress reports<br>• Interviews with UNIDO, NPCs, National Focal Points, and other national |

| Evaluation criteria | Evaluation indicators | Means of verification |
|---|---|---|
| • ***Socio-political 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?<br>• ***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?<br>• ***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 have adverse environmental impacts, which, in turn, might affect sustainability of project benefits? The evaluation will assess whether certain activities will pose a threat to the sustainability of the project outcomes. | | stakeholders and NGOs |
| **Assessment of M&E 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.<br>• ***M&E plan implementation***. The evaluation should verify that an M&E system was in place and facilitated timely tracking of progress towards 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. Was monitoring and self-evaluation carried out effectively at regional and national levels, based on indicators for outputs, outcomes, and impacts? Are there any annual work plans? Were the steering or advisory mechanisms put in place at national and regional levels? Did reporting and performance reviews take place regularly?<br>• ***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. | • Availability of logframe, workplans, roles of overseeing bodies, budgeted M&E plan<br>• Level of implementation of M&E system (execution of activities); changes in implementation approach to adapt to changing situations; compliance of the countries in the submission of relevant reports in a timely manner<br>• Compliance with reporting requirements as mentioned in TORs and/or project document | • Project document<br>• PIRs, meeting reports, progress and annual reports, financial and reports, audit and other relevant reports<br>• Interviews with UNIDO, NPCs, and NPSC members, and other relevant stakeholders / partners |
| **Monitoring of long-term changes** | | |
| The M&E 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 towards establishing a long-term monitoring system. The evaluation will address the following questions: | • Evidence of initial efforts to establish a long-term monitoring system | • Project reports, M&E reports<br>• Interviews with UNIDO, NPCs, National Focal |

| Evaluation criteria | Evaluation indicators | Means of verification |
|---|---|---|
| a. 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?<br>b. What were the accomplishments and shortcomings in establishment of this system?<br>c. 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 will continue operating upon project completion?<br>d. Is the information generated by this system being used as originally intended? | | Points, and other relevant stakeholders |
| **Project coordination and management** | | |
| The extent to which:<br>• The national management and overall coordination mechanisms have been established and been efficient and effective. Did each partner have assigned roles and responsibilities from the beginning? 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)?<br>• The UNIDO HQ-based management, coordination, monitoring, quality control, and technical inputs have been efficient, timely, and effective (e.g., problems identified timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix, and frequency of field visits)?<br>• The UNIDO CO is involved in the project. | • Level and quality of project coordination and management at regional and national level | • PIRs, meeting reports, and project coordination and management reports<br>• Interviews with UNIDO, NPCs, National Focal Points, and other relevant stakeholders |
| **Gender mainstreaming** | | |
| The evaluation will consider, but need not be limited to, the following issues that may have affected gender mainstreaming in the project:<br>• Did the project design adequately consider the gender dimensions in its interventions? If so, how? (For GEF-4 take this point out?)<br>• Was a gender analysis included in a baseline study or needs assessment (if any)? (For GEF-4 take this point out?)<br>• How gender-balanced was the composition of the project management team at regional and national levels, the Regional and National Steering Committees, experts and consultants, and the beneficiaries?<br>• 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)?<br>• Are women/gender-focused groups, associations or gender units in partner organizations consulted/included in the project?<br>• To what extent were socio-economic benefits delivered by the project at the regional, national, and local levels, including consideration of gender dimensions? | Incorporation of gender-responsive approaches and indicators, such as:<br>• Women's participation<br>• Gender balance<br>• Integration of gender dimensions in project delivery<br>• Equality, benefits, and results | • Project reports<br>• Interviews with UNIDO, NPCs, National Focal Points, NGOs, Women's Associations involved, and other beneficiaries |

## ANNEX E. FINAL EVALUATION TOOLS AND QUESTIONARIES ADAPTED TO BOLIVIA

**National counterpart: Director / High level officer**

| Questions | Response and comments |
|---|---|
| 1. How willing is your government to fulfil the Stockholm Convention agreements and targets? Are SC targets 2028 achievable? If not, what is the country's strategy for improving its performance and goals?<br>2. Is the PCBs Environmental Sound Management (ESM) a priority issue being tackled by your government? Why or why not?<br>3. Are any other initiatives (public or private sector), projects or interventions the country has been implementing for PCBs management?<br>4. Is the UNIDO project relevant to the country's priorities regarding national implementation plans POPs/PCB?<br>5. Are the project objective, components and outcomes designed to address the main problem related to the ESM of PCBs in your country? | |
| 6. What support has your government, specifically your department, given to implementing the UNIDO project? Please specify the organizational structure, human resources and political willingness.<br>7. How was the co-financing resources disbursement? Please, provide information related to co-financing resources planned and executed; if it is a difference, why?<br>8. Did you participated in the national disposal plan design? How? 2.4<br>9. Are financial resources available after the project ends? Has your organization budget for ESM of PCBs disposal until 2028? If it has, how much? | |
| 10. Are you satisfied with the support and guidance provided by UNIDO and the Regional Project Coordinator (RPC)?<br>11. Please give your feedback on the assistance and support provided by UNIDO, and other international experts. Please elaborate.<br>12. Please rate the guidance & support provided by UNIDO and the RPC separately (from 1 to 6). 1: Highly unsatisfactory; 2: Unsatisfactory; 3: Moderately unsatisfactory; 4: Moderately satisfactory; 5: Satisfactory; and, 6: Highly satisfactory<br>13. What other types of assistance do you think would have been helpful? | |
| 14. Did your country/ministry deliver all the project outputs successfully?<br>15. Are there any social or political factors that may influence positively or negatively the project results? If yes, please comment.<br>16. What were the main challenges faced to undertake the activities?<br>17. How were the challenges overcome?<br>18. Are there already visible signs of the project's impact, such as a behavioural change (Detection and analysis, storage, national inventory, disposal) between PCB private/public stakeholders? Please give some concrete examples. | |
| 19. Have the project outcomes/outputs (capacity building, ESM PCB implementation, PCB disposal, etc.) been adopted/integrated/enforced at national level? If so, please give an example and comment. If not, do you have any plan to replicate or scale project results at the national level? Please elaborate. Related with 2.2 : ESM plan<br>20. Is there any national plan for supporting PCBs small owners in the analysis, storage and disposal processes? for example additional technical support lower costs, financial incentives, taxes incentives.<br>21. How the project shared with the main stakeholders the new specific legislation for PCB, technical guidelines and bulletins related? 1.3<br>22. Have the relevant authorities started applying the Environmental Sound Management of PCBs legal framework and regulatory measures to all stakeholders, especially PCBs owners? If no why? *inspectors indirect 1.2 si se construye se aplica<br>23. Do the regulatory units have the resources to monitor the PSCs stakeholders at the national level, especially PCB owners and wastes disposal responsible? 1.3<br>24. | |
| | |

**National Project Team Members**

| Questions | Response and comments |
|---|---|
| 1. What was your role in the project?<br>2. Which were the reports/products/lists/dataset under your responsibility? How many times per year did you submit these reports/inputs?<br>3. Have there been delays in activities and outputs under your responsibility? If yes, please give the reasons for the delays.<br>4. How many months did you work on this project?<br>5. Did you work at the same time on other projects/other organization responsibilities? If yes, how much time did you dedicate to the PCB project (average percentage)?<br>6. When was the project officially launched in your country?<br>7. When was the Project Management Team (PMT) established?<br>8. What were the responsibilities of the PMT?<br>9. Who was the leader of the PMT?<br>10. Who were the members of the PMT? | |
| 11. Who was responsible to recruit the National consultants (NCs)?<br>12. What was the procedure to select and recruits the NCs?<br>13. Were they directly contracted by UNIDO?<br>14. Were you the technical counterpart of one or more consultancies (responsible for working with the consultancy products)? If yes, please reply:<br>a. What did the consultants have to deliver?<br>b. Are you satisfied with their performance/quality?<br>c. Did they submit the reports on time or late? If late, the reasons for the delay?<br>d. Could you send me a copy of these reports/products? | |
| 15. Who were the project's main/key stakeholders? Please explain their role in the project.<br>16. Were they actively participating in the project? Please reply per stakeholder.<br>17. Did the project receive support from the government/national authorities or local authorities? If yes, what type of support (human resources, capacity building, infrastructure, financial disbursements)? Please reply per stakeholder.<br>18. Were the collaboration and interaction between stakeholders satisfactory? Please comment on the relationship between the National Project Coordinator (NPC), the National Project Manager (NPM) and the PMT.<br>19. How was the communication (frequency and channel) between the key stakeholders?<br>20. How was the project data governance model? How did stakeholders share/update the information? Did the stakeholders have any common platform for information storage? For example, sample analysis results, inventory, etc. 2.4 | |
| 21. Please give your feedback on the assistance and support provided by UNIDO, RPC, National Project Coordinator and other international experts. Please elaborate.<br>22. Please rate the guidance & support provided by UNIDO and the RPC separately (from 1 to 6). 1: Highly unsatisfactory; 2: Unsatisfactory; 3: Moderately unsatisfactory; 4: Moderately satisfactory; 5: Satisfactory; and, 6: Highly satisfactory<br>23. What other types of assistance do you think would have been helpful? | |
| 24. Are there any social or political factors that may influence positively or negatively the project results? If yes, please comment.<br>25. What were the main challenges faced to undertake the activities?<br>26. How were the challenges overcome?<br>27. Did the project have any delays? If yes, specify which one, and explain why the project postponed the activities/outcomes. | |
| 28. Are there already visible signs of the project's impact, such as a behavioural change (Detection and analysis, storage, national **inventory,** disposal) between PCB private/public stakeholders? Please give some concrete examples. 2.3<br>29. Are you aware of job creation due to the project implementation? If yes, how many jobs were created, and what type of job? Any data disaggregated by gender?<br>30. Are you aware of any improvement in health risks prevention measures in the PCB sector workers and communities close to PCB storage? AWARENESS 1.4<br>31. In terms of risk decrease and health conditions due to project intervention. Do you know if any stakeholders took blood tests on these vulnerable groups? Please describe and give examples. 1.4 | |

**National Project Coordinator Questionnaire**

| Questions | Response and comments |
|---|---|
| 1. How did you hear about the project?<br>2. Was there a call for applications?<br>3. How many candidates applied for the National Project Coordinator (NPC) position?<br>4. Did you go through interviews? With whom? | |
| 5. Are you directly contracted by UNIDO?<br>6. Who are you reporting directly your work?<br>7. What are your main responsibilities as NPC?<br>8. Where is your office located? Did you work at fieldwork, if yes which activities?<br>9. How many people worked in your team? Which were their roles? Were they working exclusively on this project, or did they share their time with other interventions?<br>10. What are the main challenges you have faced in managing the project or executing the activities? How did you overcome these challenges? | |
| 11. Which were the reports/products under your responsibility? Can you share the reports/products?<br>12. What is the procedure for submitting these reports? Do you need to get the green light from the authorities before submitting to UNIDO?<br>13. Who is approving your products or evaluating your work? | |
| 14. Were other consultants contracted for the project? If yes, who and how were they recruited? Please list the consultants and contracts<br>15. As responsible for working with the consultants and user of their products, please reply:<br>16. What did the consultants have to deliver?<br>17. Are you satisfied with their performance/quality?<br>18. Did they submit the reports on time or late? If late, the reasons for the delay?<br>19. Do these reports have to be validated? If so, by whom?<br>20. Could you send me a copy of these reports/products? | |
| 21. Who were the project's main/key stakeholders? Please explain their role in the project.<br>22. Were they actively participating and collaborating in the project? Please reply per stakeholder.<br>23. Were a PSC and TAC established? How active they were 1.1<br><br>24. Did the project receive support from the government/national authorities or local authorities/private sector? If yes, what type of support (human resources, capacity building, infrastructure)? Please reply per stakeholder.<br>25. Did the co-financing resources (agree at the beginning of the project) provided by the partners?<br>26. Were the collaboration and interaction between stakeholders satisfactory?<br>27. How was the communication (frequency and channel) between the key stakeholders?<br>28. How was the project data governance model? How did stakeholders share/update the information? Did the stakeholders have any common platform for information storage? For example, sample analysis results, inventory, etc. 2.4<br>29. Como ud o su equipo se relaciono con el Qué es SINPCBs? Quien a hizo quien la adisnitra<br>30. Es una aplicación informática que gestiona información de la base de datos de los"Compuestos Orgánicos Persistentes, especificamente de los Bifenilos Policlorados (PCBs)" | |
| 31. When was the project officially launched in your country? Which is the project geographical scope?<br>32. Did the project build on the results / data produced by previous initiatives such as the inventory carried out under the NIP on POPs/ PCBs or other?<br><br>33. Who implemented the PCBs sample analysis, inventory and disposal during the project? Which technic/methodology they used?<br>34. Did the stakeholders have the technical methods, certifications/permissions and technology for PCBs sample analysis, inventory and disposal? Please describe the situation before and after the project.<br>35. Information PCB owners participated in the project inventory output 2.3? Provide: Name, specify public/private, sector (electricity/oil/mining), types and quantities of contaminated equipment, and contaminated oils and wastes along with their corresponding PCB concentrations, equiptment used for inventory and their origen (technology, methodology). | |

| | |
|---|---|
| 36. Are the capacities built (technical methods, certifications/permissions and technology) within the project robust enough to continue delivering benefits (PCBs inventory and disposal) to stakeholders beyond the project life? Why or why not? Please elaborate.<br>37. Did the project provided or had portable and analytical field equipment for the identification of contamination and concentrations.2.4d<br>38. Did you participated in the national disposal plan design? How? 2.4 is has long term approach it incldesnational and also plans for each owner<br><br>39. How many PBC owners developed their Environmental Sound Management for PCBs disposal plans during the project? 2.4<br>40. How did the project include to the maintenance workshops (transformers/equipment/oils)? Please specify this situation before and after the project. | |
| 41. Are you satisfied with the support and guidance provided by UNIDO, the Regional Project Coordinator (RPC), the National Program Director?<br>42. Please give your feedback on the assistance and support provided by UNIDO, and other international experts. Please elaborate.<br>43. Please rate the guidance & support provided by UNIDO, RPC and NPD separately (from 1 to 6). 1: Highly unsatisfactory; 2: Unsatisfactory; 3: Moderately unsatisfactory; 4: Moderately satisfactory; 5: Satisfactory; and, 6: Highly satisfactory<br>44. What other types of assistance do you think would have been helpful? | |
| 45. Has the project able to deliver all outcomes/outputs planned? Did the project had any delays, Why?<br>46. Did the project reach the key indicators main targets? Why?<br>47. Are there any social or political factors that may influence positively or negatively the project results? If yes, please comment.<br>48. What were the main challenges faced to undertake the activities?<br>49. How were the challenges overcome?<br>50. Are you aware of job creation due to the project implementation? If yes, how many jobs were created, and what type of job? Any data disaggregated by gender?<br>51. Are you aware of any improvement in health risks prevention measures in the PCB sector workers and communities close to PCB storage? 1.4<br>52. In terms of risk decrease and health conditions due to project intervention. Do you know if any stakeholders took blood tests on these vulnerable groups? Please describe and give examples. 1.4 awareness for the political side | |
| 53. How the project shared with the main stakeholders the new specific legislation for PCB, technical guidelines and bulletins related? 1.3<br>54. Have the relevant authorities started applying the Environmental Sound Management of PCBs legal framework and regulatory measures to all stakeholders, especially PCBs owners? If no why? *inspectors --- *inspectors indirect 1.2 si se construye se aplica<br>55. Do the regulatory units have the resources to monitor the PSCs stakeholders at the national level, especially PCB owners and wastes disposal responsible? 1.3<br>56.<br>57.<br>58. | |
| 59. Has the project involved women?<br>60. Did the project benefit or have a particular emphasis on women? How?<br>61. How has it integrated gender dimensions in project delivery?<br>62. Any positive or emerging outcomes on gender equality? Please elaborate on gender mainstreaming benefits and results.<br>63. | |
| 64. How COVID-19 restrictions impacted the delivery of activities and outputs? what adjustments were made because of the delays? | |
| 65. Who was the responsible of the M&E system/plan design and implementation?<br>66. How did you contribute to the project M&E System?<br>67. How was your interaction with the plan and tools?<br>68. Did the project have Medium-Term Review? If yes, which recommendations does the project implemented? | |
| 69. Do you have any inputs/comments/suggestions/issues pertinent to the project you'd like to raise with me? | |

**National Project Manager**

| Questions | Response and comments |
|---|---|
| 1. Which institution is hosting the project?<br>2. When was a letter of agreement (LOA) or contract signed with UNIDO?<br>3. Which institution signed for your country?<br>4. When (date) and for which amount?<br>5. Have the funds been timely transferred?<br>6. Are the funds sufficient to execute the activities at national level? | |
| 7. How willing is your government to fulfil the Stockholm Convention agreements and targets? Are SC targets 2028 achievable? If not, what is the country's strategy for improving its performance and goals?<br>8. Are any other initiatives (public or private sector), projects or interventions the country has been implementing for PCBs management?<br>9. What approach was adopted for the implementation of the project?<br>10. Has a national project management unit (PMU) been established?<br>11. What is your role in the project and in PMU?<br>12. Please give the structure of the PMU and list its members. | |
| 13. How was the National Project Coordinator (NPC) recruited?<br>14. Was there a call for applications?<br>15. Is the NPC directly contracted by UNIDO?<br>16. Are you satisfied with his/her performance?<br>17. Describe your collaboration with the NPC. | |
| 18. Who was responsible to recruit the National consultants (NCs)?<br>19. What was the procedure to select and recruits the NCs?<br>20. Were they directly contracted by UNIDO?<br>21. Were you the technical counterpart of one or more consultancies (responsible for working with the consultancy products)? If yes, please reply:<br>a. What did the consultants have to deliver?<br>b. Are you satisfied with their performance/quality?<br>c. Did they submit the reports on time or late? If late, the reasons for the delay?<br>d. Do these reports have to be validated? If so, by whom?<br>e. Could you send me a copy of these reports/products | |
| 22. Who were the project's main/key stakeholders? Please explain their role in the project.<br>23. Were they actively participating and collaborating in the project? Please reply per stakeholder.<br>24. Did the project receive support from the government/national authorities or local authorities/private sector? If yes, what type of support (human resources, capacity building, infrastructure)? Please reply per stakeholder.<br>25. Did the co-financing resources (agree at the beginning of the project) provided by the partners?<br>26. Were the collaboration and interaction between stakeholders satisfactory?<br>27. How was the communication (frequency and channel) between the key stakeholders?<br>28. How was the project data governance model? How did stakeholders share/update the information? Did the stakeholders have any common platform for information storage? For example, sample analysis results, **inventory**, etc. 2.4<br>*29.* ***Qué es SINPCBs?***<br>30. Es una aplicación informática que gestiona información de la base de datos de los***"Compuestos Orgánicos Persistentes, especificamente de los Bifenilos Policlorados (PCBs)"***<br>31. Quin lo diseno como se relaciona ud o su equipo con ese sistema acceso ingreso de información actuaizacion<br>32. Tienen acceso a esta plataforma los dueso de PCB para que ingresen fuindormacion como funciona? | |
| 33. When was the project officially launched in your country? Which is the project geographical scope?<br>34. Did the project build on the results / data produced by previous initiatives such as the inventory carried out under the NIP on POPs/ PCBs or other? | |

| | |
|---|---|
| 35. Are there any social or political factors that may influence positively or negatively the project results? If yes, please comment.<br>36. What were the main challenges faced to undertake the activities?<br>37. How were the challenges overcome?<br>38. Are there already visible signs of the project's impact, such as a behavioural change (Detection and analysis, storage, national inventory, disposal) between PCB private/public stakeholders? Please give some concrete examples. | |
| 39. Are you satisfied with the support and guidance provided by UNIDO, the Regional Project Coordinator (RPC), the National Program Director?<br>40. Please give your feedback on the assistance and support provided by UNIDO, and other international experts. Please elaborate.<br>41. Please rate the guidance & support provided by UNIDO, RPC and NPD separately (from 1 to 6). 1: Highly unsatisfactory; 2: Unsatisfactory; 3: Moderately unsatisfactory; 4: Moderately satisfactory; 5: Satisfactory; and, 6: Highly satisfactory<br>42. What other types of assistance do you think would have been helpful? | |
| 43. What are the reports that your country has to submit to UNIDO? Can you share the reports/products?<br>44. What is the frequency for the submission of these reports?<br>45. Have there been delays in submitting those reports? If yes, please give the reasons for the delays. | |
| 46. Have the project outcomes/outputs (capacity building, ESM PCB implementation, PCB disposal, etc.) been adopted/integrated/enforced at national level? If so, please give an example and comment. If not, do you have any plan to replicate or scale project results at the national level? Please elaborate. Related with 2.2 : ESM plan<br>47. Is there a plan for replicating or scaling up project results (e.g., inventory, disposal) at national level?<br>48. Do the regulatory units have the resources to monitor the PSCs stakeholders at the national level, especially PCB owners and wastes disposal responsible? 1.3 | |
| 49. To what extent are the continuation of project results and eventual impact dependent on the availability of financial resources? Can these financial resources be mobilized nationally?<br>50. Is there any national plan for financial support for PCB disposal? | |
| 51. Has the project involved women?<br>52. Did the project benefit or have a particular emphasis on women? How?<br>53. How has it integrated gender dimensions in project delivery?<br>54. Any positive or emerging outcomes on gender equality? Please elaborate on gender mainstreaming benefits and results. | |
| 55. How COVID-19 restrictions impacted the delivery of activities and outputs? what adjustments were made because of the delays? | |
| 56. Who is the responsible of the M&E system/plan for PCB sector at national level?<br>57. How your organization connect all stakeholders information, please comment before and after the project. | |
| 58. Do you have any inputs/comments/suggestions/issues pertinent to the project you'd like to raise with me? | |

**UNIDO PM**

| Questions | Answers |
|---|---|
| 1. How was the project developed? Was it a request from the country<br>2. How relevant is the project to UNIDO's mandate? | |
| 3. Were you involved in the development of the project (PIF and PPG)? If yes, were the key national stakeholders identified during that phase?<br>4. Were the main PCB owners (e.g. utilities) identified during the preparatory phase?<br>5. Are you managing other PCB projects? If yes, were you involved in their development? Please give the GEF ID of these projects.<br>6. Any linkages among these PCB projects? e.g., same international consultants involved or lessons learned in one project facilitated the implementation of other projects? | |
| 7. Were you PM since the beginning of the project?<br>8. If no, when did you take over and was the taking over challenging? Proper handing over? | |
| 9. How many projects were you managing during the implementation of the project under evaluation? | |

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|---|---|
| 10. Were you assisted (e,g full time project assistant) for the management of this project? | |
| 11. At UNIDO level, who is responsible to develop the TORs, the contracts and other documents to recruit and sub-contract consultants countries or for procurement?<br>12. Did UNIDO do all the procurement of equipment (e.g. for pilot projects)? What is the procedure? Any ceiling to request additional approval? Did this occur for this project?<br>13. Were other modalities used for procurement (of goods, equipment, etc.) in the project?<br>14. How long did it generally take for procurement or sub-contracting for the project? Any challenges for procurement or sub-contracting? If yes, what were the challenges?<br>15. Modality for disbursement of funds or payments? What approval are required and from whom?<br>16. Were disbursements / payments done on a timely manner? | |
| 17. Was the UNIDO Country (or Regional) Office involved during project implementation?<br>18. If yes, describe their involvement and support during implementation? | |
| 19. Financial management<br>20. Was there a need for approval to reallocate budgets? If yes, what were the reasons for these reallocations? | |
| 21. (i) Did UNIDO directly sub-contract the international as well as national consultants?<br>22. (ii) How were these consultants identified?<br>23. (iii)Procedure for their recruitment? | |
| 24. Feedback on International Consultants (ICs<br>25. Did they perform as expected?<br>26. Did they deliver on time? If no, what caused the delays?<br>27. Did they cooperate fully with the Project?<br>28. Have there been good collaboration between ICs and the other partners (UNIDO, National Project Coordinator, national counterparts, PCB owners, etc.)? | |
| 29. Feedback on national consultants (NCs)<br>30. Did they perform as expected?<br>31. Were they timely reporting?<br>32. Quality of their reports? | |
| 33. Project Management Unit (PMU) or equivalent (e.g. National Execution Agency – NEA)<br>34. When was the PMU (or equivalent) established?<br>35. PMU led by whom (e.g. NPD, NPC, NPM)?<br>36. Feedback on PMU (or equivalent)<br>37. Feedback on responsible person (NPD, NPC, NPM, or other) heading the PMU | |
| 38. Project Steering Committee, monitoring, challenges, delays, extension, achievement of objectives, and PIRs<br>39. Were a PSC and TAC established? How active they were 1.1<br>40. Did the National Executive Agency submit the required reports (progress, quarterly, annual or other) on a timely basis? Quality of these reports?<br>41. Has the gender dimension specifically been considered during implementation and monitoring of the project?<br>42. What were the major challenges faced by the project faced?<br>43. How were these challenges overcome?<br>44. Any impact of these challenges on project implementation?<br>45. Was any extension granted to the project? Reasons for extension<br>46. Have all the project objectives / outcomes / outputs been successfully achieved? All indicators available?<br>47. Were all the recommendations of the MTE considered during project implementation?<br>48. Have the PIR reports been timely submitted? | |
| 49. Mechanism for replication / scaling up in place? | |
| 50. Your general feedback on the countries and the project. | |

**PCB Owner – Electrical company**

| Questions | Response and comments |
|---|---|
| 1. About your institution/company:<br>2. When was your enterprise/company established?<br>3. What does your enterprise/ company do?<br>4. How many people does your enterprise / company employ? How many men and women?<br>5. How many transformers and capacitors do your enterprise / company own?<br>6. How do you manage them? | |
| 7. How and when was your enterprise / company contacted to be involved in project?<br>8. Was your enterprise / company involved in the preparatory phase of the project? | |
| 9. What was the role of your enterprise / company in the project?<br>10. What did your enterprise / company and its staff benefit from project?<br>11. What did your enterprise / company contribute to the project? | |
| 12. Are you satisfied with the training / support provided by the project on Environmental Sound Management (ESM)) of PCBs?<br>13. Have your enterprise / company implemented the ESM system for the identification and sound management of PCB contaminated equipment? (E.g. use of test kit for identification of PCB, safe storage of PCB contaminated equipment, workers trained on handling PCBs, etc.)<br>14. Have your enterprise / company developed a PCB phase out and disposal plan? Is this plan being implemented already? Long term disposal plan 2.4<br>15. How many tons of PCB contaminated equipment have your enterprise / company already identified and soundly managed and disposed of? 2.2<br>16. What were the major obstacles or challenges your enterprise / company faced during the implementation of the project?<br>17. How were the challenges / obstacles overcome?<br>18. What obstacles / challenges remain to identify and soundly destroy all the PCB contaminated equipment of your enterprise / company? | |
| 19. Are you satisfied with the support / assistance provided by UNIDO, the Project Management Unit (PMU), the National Project Coordinator (NPC)? Please briefly give your feedback on each one of them.<br>20. Are you satisfied with the support and assistance of the national and international consultants (NCs and ICs)? Please give your feedback<br>21. What other types of assistance do you think would have been helpful? | |
| 22. Where relevant, please rate individually the guidance & support provided by UNIDO, PMU, NPC, National Consultants (NCs) and International Consultants (ICs) from 1 to 6. 1: Highly unsatisfactory; 2: Unsatisfactory; 3: Moderately unsatisfactory; 4: Moderately satisfactory; 5: Satisfactory; and, 6: Highly satisfactory | |
| 23. Now the project is over, what improvement can you think of?<br>24. Your feedback on the project? | |

**International and National Consultant**

| | |
|---|---|
| 1. How did you come to hear about the project?<br>2. What is your field of expertise?<br>3. Did you have past experiences with UNIDO or other UN agencies?<br>4. (How were you selected? | |
| 5. For what amount have you been subcontracted? (Can we have a copy of your contract?)<br>6. What did you have to deliver in the context of the contract with UNIDO?<br>7. What were the most important obstacles or challenges to execute the activities in the contract? To what extent have these challenges and obstacles been overcome?<br>8. Have you been able to deliver successfully? On time or with delays? If delays, reasons for delays?<br>9. Did COVID19 affect delivery?<br>10. Can we have a copy of your approved reports? | |

| | |
|---|---|
| 11. Did the UNIDO PM / National Project Unit (PMU), National Project Coordinator (NPC) contribute / help to deliver the planned deliverables in the contract?<br>12. How was the collaboration with UNIDO, PMU, NPC and other key stakeholders (e.g PCB owners)? Any issue you would like to discuss? | |
| 13. 4: What has been the uptake of your deliverables (you produced in the context of the contract) by the national stakeholders / partners (e.g. national institutions, PCB owner etc.)?<br>14. Have there been challenges for uptake of your deliverables by the national stakeholders / partners? If yes, what were the challenges and how were overcome? Or, what can be done to overcome these challenges? | |
| 15. What challenges or obstacles **remain** for the sound management of PCB contaminated equipment across the country? | . |
| 16. Your feedback on the project?<br>17. What would you take out, add to, or do differently in the project? | |

**ANNEX F: CLUSTER EVALUATION TERMS OF REFERENCE**

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

# TERMS OF REFERENCE
# Cluster evaluation of UNIDO projects

# *Polychlorinated biphenyls (PCBs)*

**June 2022**

# Contents

## 1. UNIDO PCBs portfolio background

The Stockholm Convention (SC) on persistent organic pollutants (POPs) recognizes that POPs including polychlorinated biphenyls (PCBs) "possess toxic properties, resist degradation, accumulate and are transported through air, water and migratory species, across international boundaries and deposited far from their places, where they accumulate in terrestrial and aquatic ecosystems". Exposure to PCBs is of a major public health concern, in particular impacts upon women and, through them, upon future generations.
PCBs are industrial products or chemicals mainly used in the energy sector, widely deployed as dielectric and coolant fluids in electrical apparatus, carbonless copy paper and heat transfer fluids. Generally, PCBs are very stable, which explains their persistence in the environment.

UNIDO's PCBs management and disposal strategy aims to create fundamental capacities within industries, governments, institutions and PCBs owners, in order to comply with the PCB-related obligations under the SC. The projects implemented by UNIDO enhance the critical regulatory and legislative framework and strengthen institutions at the national, regional and local level to manage equipment and waste that contain PCBs in an environmentally sound manner.

Compliance with legislation is ensured by building capacities in local laboratories for PCB sampling and analysis, transfer of technology know-how for local PCBs treatment and elimination and undertaking inspections at PCB-contaminated sites. Environmentally sound PCB management practices reduce PCB releases and risks to human health and the environment; best practices are then further disseminated through public awareness raising initiatives.

Furthermore, UNIDO's PCB projects include the elimination and disposal of PCBs, often by leveraging interests of the project recipient countries in non-combustion technology, which, in many cases, offer technical and financial advantages. One is on-site PCB decontamination, which solves many technical and procedural barriers for very large transformers that cannot be transported on the road to transformer maintenance facilities. The other is the regeneration of oil. Because workers would usually need to drain and dismantle these transformers, this helps reducing the workers' risk of exposure to PCBs.

## 2. Rationale and purpose of the evaluation

Given the number of PCB projects in the last phase of implementation and taken into account significant similarities at project design level, a cluster evaluation approach will be used. The cluster will be tentatively composed of eight (8) projects selected from Table 1 below and the final list of projects included will be validated at Inception phase.

One of the main reasons of the Cluster evaluation would be to overcome some of the shortcomings present in traditional project evaluation, namely the inward-looking nature of the exercise, the timing and high transactional costs and administrative burden.

The purpose of the cluster approach is to produce synergies and increase the value added in the conduct of evaluations.

The efficiency gains produced by this approach will be invested in additional learning and more strategic assessments to inform UNIDO management, Member States, donors and beneficiaries with further more relevant and useful evaluation findings, conclusions and recommendations, such as:

a) Inter-project comparisons (e.g. differences in implementation approaches, different strategies for broader adoption)

b) Incorporation of additional aspects normally not so well-covered (e.g. socio-economic and environmental impacts of projects, other aspects (e.g., global crisis such as the COVID 19 pandemic).

c) Aggregated information for cross-cutting and recurrent issues, such as management, systemic challenges and root causes based on several cases and therefore less anecdotal.

**Table 1. List of projects for Cluster Evaluation**

| **Region** | **Country** | **UNIDO project N.** | **GEF ID** | **Them area** | **Project budget(EUR)** | **Year of Eval** | **Budget left (SAP 31.03.22 USD)** |
|---|---|---|---|---|---|---|---|
| EUR | SERBIA | 100313 | 4877 | PCB | 2,100,000 | 2022 | 786,423 |
| ASP | INDIA | 104044 | 3775 | PCB | 14,100,000 | 2022 | 107,230 |
| ASP | LAO PDR | 140157 | 4782 | PCB | 1,400,000 | 2022 | 271,414 |
| LAC | BOLIVIA | 140296 | 5646 | PCB | 2,000,000 | 2022 | 278,300 |
| LAC | GUATEMALA | 140298 | 5816 | PCB | 2,000,000 | 2022 | 403,866 |
| EUR | RUSSIAN FEDERATION | 140019 | 4915 | PCB | 7,400,000 | 2022 | 30,000 |
| AFR | CONGO | 140160 | 5325 | PCB | 975,000 | 2022 | 25,000 |
| AFR | MOROCCO | 170117 | 9916 | PCB | 1,826,484 | 2022 | 621,734 (ex OpenData) |
| ***tot*** | | | | | ***31,801,484*** | | ***1,902,233*** |

## 3. Scope and focus of the evaluation

The final cluster of projects will be decided upon in the Inception Report, based on the following criteria:

- *Thematic*: projects from same or similar programme, or within interrelated technical areas
- *Timing*: project which Terminal Evaluations are due within +/- 6 months

Projects will be selected based on the planned timing for the project end or operational completion and the respective thematic focal area. The final selection will be made in coordination with the respective project managers and the GEF coordination unit to ensure smooth implementation of the evaluation.

The Cluster Evaluation, as foreseen in the Independent Evaluation Division Work Plan (WP) 2018-19[19] and reiterated in WP 2020-21[20], will follow the UNIDO Evaluation Policy[21], the UNIDO Guidelines for the Technical Cooperation Project and Project Cycle[22], and UNIDO Evaluation Manual. Furthermore, the GEF Guidelines for GEF Agencies in Conducting Terminal Evaluations, the GEF Monitoring and Evaluation Policy[23] and the GEF Minimum Fiduciary Standards for GEF Implementing and Executing Agencies will be applied. The evaluation will also build upon the findings and recommendations of the Cluster Evaluation on UNIDO POPs portfolio carried out in 2015[24].

The evaluation has three main specific objectives:

i. Assess the projects` performance in terms of relevance, effectiveness, efficiency, sustainability, coherence, and progress to impact; and
ii. Develop a series of findings, lessons and recommendations for enhancing the design of new and implementation of ongoing projects by UNIDO.
iii. Contribute to organizational learning, by UNIDO and its counterparts, while being forward looking, thus also guiding the development of new similar projects.

[19] https://www.unido.org/sites/default/files/files/2018-11/IEV_WP_2018-19_final_180228.pdf

[20] https://www.unido.org/sites/default/files/files/2021-06/2021-04-21_EIO%20Evaluation%20work%20plan-budget%202020-21_Update%202021_EB%20Approved_F.pdf

[21] UNIDO. (2018). Director General's Bulletin: Evaluation Policy (UNIDO/DGB/2018/08)

[22] UNIDO. (2006). Director-General's Administrative Instruction No. 17/Rev.1: Guidelines for the Technical Cooperation Programme and Project Cycle (DGAI.17/Rev.1, 24 August 2006)

[23] https://www.thegef.org/sites/default/files/council-meeting documents/EN_GEF.ME_C56_02_GEF_Evaluation_Policy_May_2019_0.pdf

[24] https://www.unido.org/sites/default/files/2015-04/FINAL_report_NIPS_CLUSTER_EVAL_20150409_0.pdf#page=81&zoom=100,120,76

## 4. Evaluation approach and methodology

The cluster evaluation will be carried out as an independent in-depth exercise using a participatory approach whereby all key parties associated with the projects to be evaluated will be informed and consulted throughout the process. The evaluation team leader will liaise with the UNIDO Independent Evaluation Division (ODG/EIO/IED) on the conduct of the evaluation and methodological issues.

The evaluation will use a theory of change (ToC) approach[25] and mixed methods to collect data and information from a range of sources and informants. It will pay attention to triangulating the data and information collected before forming its assessment. This is essential to ensure an evidence-based and credible evaluation, with robust analytical underpinning.

The theory of change will depict the causal and transformational pathways from project outputs to outcomes and longer-term impacts. It also identifies the drivers and barriers to achieving results. The learning from this analysis will be useful for the design of the future projects so that the management team can effectively use the theory of change to manage the project based on results.

## 5. Data collection methods

The complete array of instruments for data collection will be finalized at Inception Report stage. Among the main methods foreseen to be used by the Evaluation Team:

(a) **Desk and literature review** of documents related to the projects, including but not limited to:
- The original project document, monitoring reports (such as progress and financial reports, mid-term review report, technical reports, back-to-office mission report(s), end-of-contract report(s) and relevant correspondence.
- Notes from the meetings of steering committees involved in the project.

(b) **Stakeholder consultations** will be conducted through structured and semi-structured interviews and focus group discussion. Key stakeholders to be interviewed include:
- UNIDO Management and staff involved in the projects; and
- Representatives of donors, counterparts and stakeholders.

(c) Whenever possible**, field visits** to project sites in the involved countries.
Due to the persisting emergency caused by the virus Covid-19, it shall be noted that restrictions on international travels are still in place at the time this ToR is drafted, therefore the field visits should be carried out by the national consultants only.
- On-site observation of results achieved by the project, including interviews of actual and potential project beneficiaries.
- Interviews with the relevant UNIDO Country Office(s) representative to the extent that he/she was involved in the project, and the project's management members and

[25] For more information on Theory of Change, please see chapter 3.4 of UNIDO Evaluation Manual

the various national [and sub-regional] authorities dealing with project activities as necessary.

(d) **Online data collection** methods such as surveys will be used to the extent possible.

## 6. Evaluation key questions and criteria

The key evaluation questions, to be further refined at the level of Inception Report, are the following:

(ii) Have they done the right things in the context of PCB issues in the respective countries? How well have the projects fit with other policies and interventions that affect PCBs in the respective countries?

(iii) What are the projects` key results (outputs, outcome and impact)? To what extent have the expected results been achieved or are likely to be achieved? To what extent are the achieved results to be sustained after the completion of the projects?

(iv) What are the key drivers and barriers to achieve the long term objectives? To what extent have the projects helped put in place the conditions likely to address the drivers, overcome barriers and contribute to the long term objectives?

(v) What are the key risks (e.g. in terms of financial, socio-political, institutional and environmental risks) and how these risks may affect the continuation of results after the projects end?

(vi) What lessons can be drawn from the successful and unsuccessful practices in designing, implementing and managing the analysed projects?

(vii) How far have the Mid-term reviews conducted on the cluster projects been used to ensure the success of the projects in the second phase of implementation?

(viii) Are there tangible differences with regard to the evaluation criteria between MSPs and FSPs?

(ix) Were lessons learned from previous projects in the countries and the POPs thematic area sufficiently taken into account while designing the cluster projects?

(x) Was the gender dimension given sufficient attention at both project design and implementation?

The table below provides the key evaluation criteria to be assessed by the evaluation. The details questions to assess each evaluation criterion are in annex 2 of UNIDO Evaluation Manual.

**Table 2. Project evaluation criteria**

| # | Evaluation criteria | Mandatory rating |
|---|---|---|
| **A** | **Progress to impact** | **Yes** |
| **B** | **Project design** | **Yes** |
| 1 | • Overall design | Yes |
| 2 | • Logframe | Yes |
| **C** | **Project performance** | |
| 1 | • Relevance | Yes |

| # | Evaluation criteria | Mandatory rating |
|---|---|---|
| 2 | • Effectiveness | Yes |
| 3 | • Coherence | Yes |
| 4 | • Efficiency | Yes |
| 5 | • Sustainability of benefits | Yes |
| **D** | **Cross-cutting performance criteria** | |
| 1 | • Gender mainstreaming | Yes |
| 2 | • M&E:<br>✓ M&E design<br>✓ M&E implementation | <br>Yes<br>Yes |
| 3 | • Results-based Management (RBM) | Yes |
| **E** | **Performance of partners** | |
| 1 | • UNIDO | Yes |
| 2 | • National counterparts | Yes |
| 3 | • Donor | Yes |
| **F** | **Overall assessment** | Yes |

**Performance of partners**

The assessment of performance of partners will ***include*** the quality of implementation and execution of the GEF Agencies and project executing entities in discharging their expected roles and responsibilities. The assessment will take into account the following:

- Quality of Implementation, e.g. the extent to which the agency delivered effectively, with focus on elements that were controllable from the given implementing agency's perspective and how well risks were identified and managed.
- Quality of Execution, e.g. the appropriate use of funds, procurement and contracting of goods and services.

The cluster evaluation will assess the following topics, for which ***ratings are not required***:

a. **Need for follow-up**: e.g. in instances financial mismanagement, unintended negative impacts or risks.
b. **Materialization of co-financing**: e.g. the extent to which the expected co-financing materialized, whether co-financing was administered by the project management or by some other organization; whether and how shortfall or excess in co-financing affected project results.
c. **Environmental and Social Safeguards**[26]: appropriate environmental and social safeguards were addressed in the projects` design and implementation, e.g.

[26] Refer to GEF/C.41/10/Rev.1 available at: http://www.thegef.org/sites/default/files/council-meetingdocuments/C.41.10.Rev_1.Policy_on_Environmental_and_Social_Safeguards.Final%20of%20Nov%2018.pdf

preventive or mitigation measures for any foreseeable adverse effects and/or harm to environment or to any stakeholder.

## 7. Rating system

In line with the practice adopted by many development agencies, the UNIDO Independent Evaluation Division uses a six-point rating system, where 6 is the highest score (highly satisfactory) and 1 is the lowest (highly unsatisfactory) as per table below.

**Table 3. Project rating criteria**

| Score | | Definition | Category |
|---|---|---|---|
| 6 | Highly satisfactory | Level of achievement presents no shortcomings (90% - 100% achievement rate of planned expectations and targets). | SATISFACTORY |
| 5 | Satisfactory | Level of achievement presents minor shortcomings (70% - 89% achievement rate of planned expectations and targets). | |
| 4 | Moderately satisfactory | Level of achievement presents moderate shortcomings (50% - 69% achievement rate of planned expectations and targets). | |
| 3 | Moderately unsatisfactory | Level of achievement presents some significant shortcomings (30% - 49% achievement rate of planned expectations and targets). | UNSATISFACTORY |
| 2 | Unsatisfactory | Level of achievement presents major shortcomings (10% - 29% achievement rate of planned expectations and targets). | |
| 1 | Highly unsatisfactory | Level of achievement presents severe shortcomings (0% - 9% achievement rate of planned expectations and targets). | |

## 8. Evaluation process

The cluster evaluation will be conducted from June 2022 to December 2022. The evaluation will be implemented in five phases which are not strictly sequential, but in many cases iterative, conducted in parallel and partly overlapping:

1) Inception phase: The evaluation team will prepare the inception report providing details on the evaluation methodology and include an evaluation matrix with specific issues for the evaluation to address; the specific site visits will be determined during the inception phase, taking into consideration the findings and recommendations of the mid-term

reviews – whenever available – and the current limitations imposed by the Covid-10 pandemic.
2) Desk review and data analysis;
3) Interviews, survey and literature review;
4) Country visits (whenever possible) and debriefing to key relevant stakeholders in the field;
5) Data analysis, report writing and virtual debriefing to UNIDO staff at the Headquarters; and
6) Final report issuance and distribution, and publication of the final evaluation report in UNIDO website.

## 9. Time schedule and deliverables

The evaluation is scheduled to take place from April 2022 to August 2022. The data collection phase from the field is tentatively planned for May 2022 but will be tailored on the different stages of projects` implementation and specific requirements by the different countries. At the end of the data collection, the evaluation team will present the preliminary findings for key relevant stakeholders involved in the project in the country. The tentative timelines are provided in the table below.

After the debriefing to the national stakeholders, the evaluation team will debrief UNIDO Headquarters and the internal stakeholders involved for debriefing and presentation of the preliminary findings of the terminal evaluation. Online presentation is to be arranged in case the visit cannot take place.

After this phase and the factual validation, a synthesis aggregating the comparable findings from the different projects is expected to be produced by the team. The draft TE report will be submitted 4 to 6 weeks after the end of the mission. The draft TE report is to be shared with the UNIDO Project Managers (PMs), UNIDO Independent Evaluation Division, the UNIDO GEF Coordinator and GEF OFP and other stakeholders for comments. The ET leader is expected to revise the draft TE report based on the comments received, edit the language and submit the final version of the TE report in accordance with UNIDO ODG/EIO/EID standards.

**Table 4. Tentative timelines**

| Timelines | Tasks |
|---|---|
| June 2022 | Desk review and writing of inception report |
| June 2022 | Online briefing with UNIDO project manager and the project teams based in Vienna. |
| July-August 2022 | Data collection from the Field |
| August 2022 | Debriefing in Vienna<br>Preparation of first draft evaluation report |

| | |
|---|---|
| September 2022 | Internal peer review of the report by UNIDO's Independent Evaluation Division and other stakeholder comments to draft evaluation report |
| October 2022 | Preparation of the synthesis of aggregated findings from the clustered evaluations |
| November 2022 | Review of the Synthesis and the first draft |
| December 2022 | Final evaluation report |

## 10. Evaluation team composition

Given the number of projects included in the Evaluation and the current travel restrictions in place, the evaluation team will be composed of a mix of two international evaluation consultants - one acting as the team leader - and one national evaluation consultant per country, supported by a Cluster Evaluation coordinator from UNIDO IED. The evaluation team members will possess a mixed skill set and experience including evaluation, relevant technical expertise, social and environmental safeguards, and gender. All the consultants will be contracted by UNIDO pooling funds from the projects´ evaluation budgets.

The tasks of each team member are specified in the job descriptions annexed to these terms of reference. The evaluation team is required to provide information relevant for follow-up studies, including terminal evaluation verification on request to the GEF partnership up to three years after completion of the terminal evaluation.

According to UNIDO Evaluation Policy, members of the evaluation team must not have been directly involved in the design and/or implementation of the project under evaluation.

The UNIDO Project Manager and the project management team in the different countries involved will support the evaluation team. The UNIDO GEF Coordinator and GEF Operational Focal Point (OFP) will be briefed on the evaluation and provide support to its conduct. GEF OFP(s) will, where applicable and feasible, also be briefed and debriefed at the start and end of the evaluation mission.

An evaluation manager from UNIDO Independent Evaluation Division will provide technical backstopping to the evaluation team and ensure the quality of the evaluation. The UNIDO Project Managers and national project teams will act as resourced persons and provide support to the evaluation team and the evaluation manager.

## 11. Reporting

**Inception report**

This Terms of Reference (ToR) provides 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 Team Leader will prepare, in

collaboration with the team member, a short inception report that will operationalize the ToR relating to the evaluation questions and provide information on what type and how the evidence will be collected (methodology). It will be discussed with and cleared by the responsible UNIDO Evaluation Manager.

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 evaluation team members; field mission plan, including places to be visited, people to be interviewed and possible surveys to be conducted and a debriefing and reporting timetable[27]. The draft inception report will also include a suggested outline of the overall synthesis report (see below), including the specific evaluation questions for the cross-cutting analysis.

**Evaluation report format and review procedures**

All selected projects will be evaluated meeting GEF minimum requirements (see Annex I).

In terms of final outputs, one short evaluation report per project will be produced, including project performance ratings according to OECD-DAC criteria.

In addition, a final synthesis report of the evaluation findings of the cluster projects, inter-project comparisons and additional evaluation aspects will also be produced.

The draft reports will be delivered to UNIDO Independent Evaluation Division (with a suggested report outline) and circulated to UNIDO staff and key stakeholders associated with the project for factual validation and comments. Any comments or responses, or feedback on any errors of fact to the draft report will be sent to UNIDO's Independent Evaluation Division for collation and onward transmission to the evaluation team who will be advised of 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 evaluation team will present its preliminary findings to the local stakeholders at the end of the field visit and take into account their feed-back in preparing the evaluation report. A presentation of preliminary findings will take place at UNIDO HQ afterwards.

The evaluation report should be brief, to the point and easy to understand. It must explain the purpose of the evaluation, 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

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

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 by UNIDO Independent Evaluation Division.

## 12. Quality assurance

All UNIDO evaluations are subject to quality assessments by UNIDO Independent Evaluation Division. Quality assurance and control is exercised in different ways throughout the evaluation process (briefing of consultants on methodology and process of UNIDO Independent Evaluation Division, providing inputs regarding findings, lessons learned and recommendations from other UNIDO evaluations, review of inception report and evaluation report by UNIDO's Independent Evaluation Division).

The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality. The applied evaluation quality assessment criteria are used as a tool to provide structured feedback. UNIDO Independent Evaluation Division 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 UNIDO Independent Evaluation Division, which will submit the final report to the GEF Evaluation Office and circulate it within UNIDO together with a management response sheet.

Annex 1: Job descriptions

**UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION**

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

| | |
|---|---|
| **Title:** | Senior evaluation consultant, team leader |
| **Main Duty Station and Location:** | Home-based |
| **Missions:** | Not foreseen at this stage |
| **Start of Contract (EOD):** | July 2022 |
| **End of Contract (COB):** | December 2022 |
| **Number of Working Days:** | 70 working days spread over the above mentioned period |

## 1. ORGANIZATIONAL CONTEXT

The UNIDO Independent Evaluation Division (ODG/EIO/IED) is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides evidence-based analysis and assessment on result and practices that feed into the programmatic and strategic decision-making processes. Independent evaluations provide credible, reliable and useful assessment that enables the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. ODG/EIO/IED is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

## 2. PROJECT CONTEXT

The international evaluation consultant/team leader will evaluate the projects in accordance with the evaluation-related terms of reference (TOR) and provide a final report comprehensive of the single projects` ratings and a final synthesis. They will perform, inter alia, the following main tasks:

| 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).<br>Define technical issues and questions to be addressed by the national technical evaluator prior to the field visits – when possible.<br>Determine key data to collect in the field and adjust the key data collection instrument if needed.<br>In coordination with the project managers, the project management teams and the national technical evaluators, determine the suitable sites to be visited and stakeholders to be interviewed. | • Adjusted table of evaluation questions, depending on country specific context;<br>• Draft list of stakeholders to interview during the field missions.<br>• Identify issues and questions to be addressed by the local technical expert | 8 days | Home-based |
| 2. Prepare an inception report which streamlines the specific questions to address the key issues in the TOR, specific | • Draft theory of change and Evaluation | 5 days | Home based |

| MAIN DUTIES | Concrete/ Measurable Outputs to be achieved | Working Days | Location |
|---|---|---|---|
| methods that will be used and data to collect in the field visits, confirm the evaluation methodology, draft theory of change, and tentative agenda for field work.<br><br>Provide guidance to the national evaluator to prepare initial draft of output analysis and review technical inputs prepared by national evaluator, prior to field mission. | framework to submit to the Evaluation Manager for clearance.<br>• Guidance to the national evaluator to prepare output analysis and technical reports | | |
| 3. Briefing with the UNIDO Independent Evaluation Division, project managers and other key stakeholders at UNIDO HQ (included is preparation of presentation). | • Detailed evaluation schedule with tentative mission agenda (incl. list of stakeholders to interview and site visits); mission planning;<br>• Division of evaluation tasks with the National Consultant. | 1 day | Through Skype/Zoom |
| 4. Coordinate the field missions (whenever possible) conducted by the national consultants in the different countries involved. | • Organise and participate remotely – whenever possible - to meetings with relevant project stakeholders, beneficiaries, the GEF Operational Focal Point (OFP), etc. for the collection of data and clarifications;<br>• Agreement with the National Consultants on the structure and content of the evaluation reports and the distribution of writing tasks;<br>• Evaluation presentation of the evaluation's preliminary findings, conclusions and recommendations to | 15 days | (specific project site to be identified at inception phase) |

| MAIN DUTIES | Concrete/ Measurable Outputs to be achieved | Working Days | Location |
|---|---|---|---|
| | stakeholders in the country, including the GEF OFP, at the end of the missions. | | |
| 5. Present overall findings and recommendations to the stakeholders at UNIDO HQ | • After field missions: Presentation slides, feedback from stakeholders obtained and discussed. | 1 day | Through Skype/Zoom |
| 6. Prepare the evaluation report, with inputs from the National Consultant, according to the TOR;<br>Coordinate the inputs from the National Consultant and combine with their own inputs into the draft evaluation report.<br>Share the evaluation report with UNIDO HQ and national stakeholders for feedback and comments. | • Draft evaluation report. | 25 days | Home-based |
| 7. Prepare a final Synthesis of findings stemming from the different projects analysed. | • Draft Synthesis report. | 10 days | Home-based |
| 8. 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 |

**MINIMUM ORGANIZATIONAL REQUIREMENTS**

**Education:**

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

**Technical and functional experience**:

- Minimum of 15-20 years' experience in evaluation of development projects and programmes
- Sound knowledge of
- 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 of GEF projects and knowledge of UNIDO activities an asset
- Knowledge about multilateral technical cooperation and the UN, international development priorities and frameworks
- Familiarity with gender analysis tools and methodologies an asset

- Working experience in developing countries

**Languages**:

Fluency in written and spoken English is required. 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.

REQUIRED COMPETENCIES

**Core values:**

WE LIVE AND ACT WITH INTEGRITY: work honestly, openly and impartially.
WE SHOW PROFESSIONALISM: work hard and competently in a committed and responsible manner.
WE RESPECT DIVERSITY: work together effectively, respectfully and inclusively, regardless of our differences in culture and perspective.

**Core competencies:**

WE FOCUS ON PEOPLE: cooperate to fully reach our potential –and this is true for our colleagues as well as our clients. Emotional intelligence and receptiveness are vital parts of our UNIDO identity.
WE FOCUS ON RESULTS AND RESPONSIBILITIES: focus on planning, organizing and managing our work effectively and efficiently. We are responsible and accountable for achieving our results and meeting our performance standards. This accountability does not end with our colleagues and supervisors, but we also owe it to those we serve and who have trusted us to contribute to a better, safer and healthier world.
WE COMMUNICATE AND EARN TRUST: communicate effectively with one another and build an environment of trust where we can all excel in our work.
WE THINK OUTSIDE THE BOX AND INNOVATE: To stay relevant, we continuously improve, support innovation, share our knowledge and skills, and learn from one another.

**UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION**

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

| | |
|---|---|
| **Title:** | International Evaluation Consultant |
| **Main Duty Station and Location:** | Home-based |

| | |
|---|---|
| **Missions:** | Not foreseen at this stage |
| **Start of Contract (EOD):** | July 2022 |
| **End of Contract (COB):** | December 2022 |
| **Number of Working Days:** | 80 working days spread over the above mentioned period |

## 3. ORGANIZATIONAL CONTEXT

The UNIDO Independent Evaluation Division (ODG/EIO/IED) is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides evidence-based analysis and assessment on result and practices that feed into the programmatic and strategic decision-making processes. Independent evaluations provide credible, reliable and useful assessment that enables the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. ODG/EIO/IED is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

## 4. PROJECT CONTEXT

The international evaluation consultant/team leader will evaluate the projects in accordance with the evaluation-related terms of reference (TOR) and provide a final report comprehensive of the single projects` ratings and a final synthesis. They will perform, inter alia, the following main tasks:

| 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).<br>Define technical issues and questions to be addressed by the national technical evaluator prior to the field visits – when possible.<br>Determine key data to collect in the field and adjust the key data collection instrument if needed. | • Adjusted table of evaluation questions, depending on country specific context;<br>• Draft list of stakeholders to interview during the field missions.<br>• Identify issues and questions to be addressed by the local technical expert | 8 days | Home-based |

| MAIN DUTIES | Concrete/ Measurable Outputs to be achieved | Working Days | Location |
|---|---|---|---|
| In coordination with the project managers, the project management teams and the national technical evaluators, determine the suitable sites to be visited and stakeholders to be interviewed. | | | |
| 2. Prepare an inception report which streamlines the specific questions to address the key issues in the TOR, specific methods that will be used and data to collect in the field visits, confirm the evaluation methodology, draft theory of change, and tentative agenda for field work.<br><br>Provide guidance to the national evaluator to prepare initial draft of output analysis and review technical inputs prepared by national evaluator, prior to field mission. | • Draft theory of change and Evaluation framework to submit to the Evaluation Manager for clearance.<br>• Guidance to the national evaluator to prepare output analysis and technical reports | 5 days | Home based |
| 3. Briefing with the UNIDO Independent Evaluation Division, project managers and other key stakeholders at UNIDO HQ (included is preparation of presentation). | • Detailed evaluation schedule with tentative mission agenda (incl. list of stakeholders to interview and site visits); mission planning;<br>• Division of evaluation tasks with the National Consultant. | 1 day | Through Skype/Zoom |
| 4. Coordinate the field missions (whenever possible) conducted by the national consultants in the different countries involved. | • Organise and participate remotely – whenever possible - to meetings with relevant project stakeholders, beneficiaries, the GEF Operational Focal Point (OFP), etc. for the collection of data and clarifications;<br>• Agreement with the National Consultants on the structure and | 20 days | (specific project site to be identified at inception phase) |

| MAIN DUTIES | Concrete/ Measurable Outputs to be achieved | Working Days | Location |
|---|---|---|---|
| | content of the evaluation reports and the distribution of writing tasks;<br>• Evaluation presentation of the evaluation's preliminary findings, conclusions and recommendations to stakeholders in the country, including the GEF OFP, at the end of the missions. | | |
| 5. Present overall findings and recommendations to the stakeholders at UNIDO HQ | • After field missions: Presentation slides, feedback from stakeholders obtained and discussed. | 1 day | Through Skype/Zoom |
| 6. Prepare the evaluation report, with inputs from the National Consultant, according to the TOR;<br>Coordinate the inputs from the National Consultant and combine with their own inputs into the draft evaluation report.<br>Share the evaluation report with UNIDO HQ and national stakeholders for feedback and comments. | • Draft evaluation report. | 30 days | Home-based |
| 7. Prepare a final Synthesis of findings stemming from the different projects analysed. | • Draft Synthesis report. | 10 days | Home-based |
| 8. 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 |

**MINIMUM ORGANIZATIONAL REQUIREMENTS**

**Education:**

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

**Technical and functional experience**:

- Minimum of 15-20 years' experience in evaluation of development projects and programmes
- Sound knowledge of
- 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 of GEF projects and knowledge of UNIDO activities an asset
- Knowledge about multilateral technical cooperation and the UN, international development priorities and frameworks
- Familiarity with gender analysis tools and methodologies an asset
- Working experience in developing countries

**Languages**:

Fluency in written and spoken English is required. 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.

REQUIRED COMPETENCIES

**Core values:**

WE LIVE AND ACT WITH INTEGRITY: work honestly, openly and impartially.
WE SHOW PROFESSIONALISM: work hard and competently in a committed and responsible manner.
WE RESPECT DIVERSITY: work together effectively, respectfully and inclusively, regardless of our differences in culture and perspective.

**Core competencies:**

WE FOCUS ON PEOPLE: cooperate to fully reach our potential –and this is true for our colleagues as well as our clients. Emotional intelligence and receptiveness are vital parts of our UNIDO identity.
WE FOCUS ON RESULTS AND RESPONSIBILITIES: focus on planning, organizing and managing our work effectively and efficiently. We are responsible and accountable for achieving our results and meeting our performance standards. This accountability does not end with our colleagues and supervisors, but we also owe it to those we serve and who have trusted us to contribute to a better, safer and healthier world.
WE COMMUNICATE AND EARN TRUST: communicate effectively with one another and build an environment of trust where we can all excel in our work.
WE THINK OUTSIDE THE BOX AND INNOVATE: To stay relevant, we continuously improve, support innovation, share our knowledge and skills, and learn from one another.

**UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION**

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

| | |
|---|---|
| **Title:** | International Evaluation Consultant for LAC region |
| **Main Duty Station and Location:** | Home-based |
| **Missions:** | To be decided at Inception phase |
| **Start of Contract (EOD):** | August 2022 |
| **End of Contract (COB):** | December 2022 |
| **Number of Working Days:** | 50 working days spread over the above mentioned period |

## 5. ORGANIZATIONAL CONTEXT

The United Nations Industrial Development Organization (UNIDO) is the specialized agency of the United Nations that promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability. The mission of UNIDO, as described in the Lima Declaration adopted at the fifteenth session of the UNIDO General Conference in 2013 as well as the Abu Dhabi Declaration adopted at the eighteenth session of UNIDO General Conference in 2019, is to promote and accelerate inclusive and sustainable industrial development (ISID) in Member States. The relevance of ISID as an integrated approach to all three pillars of sustainable development is recognized by the 2030 Agenda for Sustainable Development and the related Sustainable Development Goals (SDGs), which will frame United Nations and country efforts towards sustainable development. UNIDO's mandate is fully recognized in SDG-9, which calls to "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation". The relevance of ISID, however, applies in greater or lesser extent to all SDGs. Accordingly, the Organization's programmatic focus is structured in four strategic priorities: Creating shared prosperity; Advancing economic competitiveness; Safeguarding the environment; and Strengthening knowledge and institutions.

Each of these programmatic fields of activity contains a number of individual programmes, which are implemented in a holistic manner to achieve effective outcomes and impacts through UNIDO's four enabling functions: (i) technical cooperation; (ii) analytical and research functions and policy advisory services; (iii) normative functions and standards and quality-related activities; and (iv) convening and partnerships for knowledge transfer, networking and industrial cooperation. Such core functions are carried out in Departments/Offices in its Headquarters, Regional Offices and Hubs and Country Offices.

The UNIDO Independent Evaluation Division (ODG/EIO/IED) is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides evidence-based analysis and assessment on result and practices that feed into the programmatic and strategic decision-making processes. Independent evaluations provide credible, reliable and useful assessment that enables the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. ODG/EIO/IED is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

## 6. PROJECT CONTEXT

The international evaluation consultant/team leader will evaluate the projects in accordance with the evaluation-related terms of reference (TOR) and provide a final report comprehensive of the single projects` ratings and a final synthesis. They will perform, inter alia, the following main tasks:

| 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).<br>Define technical issues and questions to be addressed by the national technical evaluator prior to the field visits – when possible.<br>Determine key data to collect in the field and adjust the key data collection instrument if needed.<br>In coordination with the evaluation team leader, project managers, the project management teams and the national technical evaluators, determine the suitable sites to be visited and stakeholders to be interviewed. | • Adjusted table of evaluation questions, depending on country specific context;<br>• Draft list of stakeholders to interview during the field missions.<br>• Identify issues and questions to be addressed by the local technical expert | 6 days | Home-based |
| 2. Briefing with the UNIDO Independent Evaluation Division, project managers and other key stakeholders at UNIDO HQ (included is preparation of presentation). | • Detailed evaluation schedule with tentative mission agenda (incl. list of stakeholders to interview and site visits); mission planning; | 1 day | Through Skype/Zoom |

| MAIN DUTIES | Concrete/ Measurable Outputs to be achieved | Working Days | Location |
|---|---|---|---|
| | • Division of evaluation tasks with the evaluation team. | | |
| 3. Conduct the field missions (whenever possible). | • Organise and participate remotely – whenever possible - to meetings with relevant project stakeholders, beneficiaries, the GEF Operational Focal Point (OFP), etc. for the collection of data and clarifications;<br>• Agreement with the other international Consultants on the structure and content of the evaluation reports and the distribution of writing tasks;<br>• Evaluation presentation of the evaluation's preliminary findings, conclusions and recommendations to stakeholders in the country, including the GEF OFP, at the end of the missions. | 15 days | (specific project site to be identified at inception phase) |
| 4. Present overall findings and recommendations to the stakeholders at UNIDO HQ during the team presentation of preliminary findings. | • After field missions: Presentation slides, feedback from stakeholders obtained and discussed. | 1 day | Through Skype/Zoom |
| 5. Prepare the evaluation reports for the two projects, according to the TOR;<br>Coordinate the inputs with the International Consultant and combine with their own inputs into the draft evaluation report. | • Draft evaluation report. | 20 days | Home-based |

| MAIN DUTIES | Concrete/ Measurable Outputs to be achieved | Working Days | Location |
|---|---|---|---|
| Share the evaluation report with UNIDO HQ and national stakeholders for feedback and comments. | | | |
| 6. Participate in the preparation of the final Synthesis of findings stemming from the different projects analysed. | • Draft Synthesis report. | 5 days | Home-based |
| 7. 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. | 2 days | Home-based |
| Tot | | 50 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 evaluation of development projects and programmes
- Sound knowledge of PCBs and UNIDO`s portfolio
- 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 of GEF projects and knowledge of UNIDO activities an asset
- Knowledge about multilateral technical cooperation and the UN, international development priorities and frameworks
- Familiarity with gender analysis tools and methodologies an asset
- Working experience in developing countries

**Languages**:

Fluency in written and spoken English and Spanish is required. 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.

REQUIRED COMPETENCIES

**Core values:**

WE LIVE AND ACT WITH INTEGRITY: work honestly, openly and impartially.

WE SHOW PROFESSIONALISM: work hard and competently in a committed and responsible manner.

WE RESPECT DIVERSITY: work together effectively, respectfully and inclusively, regardless of our differences in culture and perspective.

**Core competencies:**

WE FOCUS ON PEOPLE: cooperate to fully reach our potential –and this is true for our colleagues as well as our clients. Emotional intelligence and receptiveness are vital parts of our UNIDO identity.

WE FOCUS ON RESULTS AND RESPONSIBILITIES: focus on planning, organizing and managing our work effectively and efficiently. We are responsible and accountable for achieving our results and meeting our performance standards. This accountability does not end with our colleagues and supervisors, but we also owe it to those we serve and who have trusted us to contribute to a better, safer and healthier world.

WE COMMUNICATE AND EARN TRUST: communicate effectively with one another and build an environment of trust where we can all excel in our work.

WE THINK OUTSIDE THE BOX AND INNOVATE: To stay relevant, we continuously improve, support innovation, share our knowledge and skills, and learn from one another.

**UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION**

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

***Master JD for all the national consultants – to be tailored on the different countries***

| | |
|---|---|
| **Title:** | National evaluation consultant |
| **Main Duty Station and Location:** | Home-based |
| **Mission/s to:** | Travel to potential sites within country name |
| **Start of Contract:** | July 2022 |
| **End of Contract:** | December 2022 |
| **Number of Working Days:** | 30 days spread over the above mentioned period |

**ORGANIZATIONAL CONTEXT**

The UNIDO Independent Evaluation Division (ODG/EIO/IED) is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides evidence-based analysis and assessment on result and practices that feed into the programmatic and strategic decision-making processes. Independent evaluations provide credible, reliable and useful assessment that enables the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. ODG/EIO/IED 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.

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** |
|---|---|---|---|
| Desk review<br>Review and analyze project documentation and relevant country background information; in cooperation with the team leader, determine key data to collect in the field and prepare key instruments in English (questionnaires, logic models);<br>If needed, recommend adjustments to the evaluation framework and Theory of Change in order to ensure their understanding in the local context. | Evaluation questions, questionnaires/interview guide, logic models adjusted to ensure understanding in the national context;<br>A stakeholder mapping, in coordination with the project team. | 4 days | Home-based |
| Carry out preliminary analysis of pertaining technical issues determined with the Team Leader.<br>In close coordination with the project staff team verify the extent of achievement of project outputs prior to field visits.<br>Develop a brief analysis of key contextual conditions relevant to the project | • Report addressing technical issues and question previously identified with the Team leader<br>• Tables that present extent of achievement of project outputs<br>• Brief analysis of conditions relevant to the project | 4 days | Home-based |
| 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 project staff in the field. | • Detailed evaluation schedule.<br>• List of stakeholders to interview during the field missions. | 2 days | Home-based |
| Coordinate and conduct the field mission with the team leader in cooperation with the Project Management Unit, where required;<br>Consult with the Team Leader on the structure and content of the evaluation report and the distribution of writing tasks.<br>Conduct the translation for the Team Leader, when needed. | • Presentations of the evaluation's initial findings, draft conclusions and recommendations to stakeholders in the country at the end of the mission.<br>• Agreement with the Team Leader on the structure and content of the evaluation report and the distribution of writing tasks. | 7 days (including travel days) | In XXX |
| Draft evaluation report with findings and recommendations stemming from the analysis and the field mission (when applicable). | • Short evaluation report drafted | 13 days | Home-based |

| MAIN DUTIES | Concrete/measurable outputs to be achieved | Expected duration | Location |
|---|---|---|---|
| Follow up with stakeholders regarding additional information promised during interviews<br>Revise the draft project evaluation report based on comments from UNIDO Independent Evaluation Division and stakeholders and proof read the final version. | | | |

**MINIMUM ORGANIZATIONAL REQUIREMENTS**

**Education:** Advanced university degree in environmental science, engineering or other relevant discipline like developmental studies with a specialization in industrial energy efficiency and/or climate change.

**Technical and functional experience**:

- Excellent knowledge and competency in the field of POPs and PCBs in particular.
- Evaluation experience, including evaluation of development cooperation in developing countries is an asset
- Exposure to the development needs, conditions and challenges in their country and region.
- Familiarity with gender analysis tools and methodologies and asset
- Familiarity with the institutional context of the project is desirable.

**Languages**: Fluency in written and spoken English and in local language 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.

REQUIRED COMPETENCIES

**Core values:**

WE LIVE AND ACT WITH INTEGRITY: work honestly, openly and impartially.
WE SHOW PROFESSIONALISM: work hard and competently in a committed and responsible manner.
WE RESPECT DIVERSITY: work together effectively, respectfully and inclusively, regardless of our differences in culture and perspective.

**Core competencies:**

WE FOCUS ON PEOPLE: cooperate to fully reach our potential –and this is true for our colleagues as well as our clients. Emotional intelligence and receptiveness are vital parts of our UNIDO identity.
WE FOCUS ON RESULTS AND RESPONSIBILITIES: focus on planning, organizing and managing our work effectively and efficiently. We are responsible and accountable for achieving our results and meeting our performance standards. This accountability does not end with our colleagues and supervisors, but we also owe it to those we serve and who have trusted us to contribute to a better, safer and healthier world.
WE COMMUNICATE AND EARN TRUST: communicate effectively with one another and build an

environment of trust where we can all excel in our work.
WE THINK OUTSIDE THE BOX AND INNOVATE: To stay relevant, we continuously improve, support innovation, share our knowledge and skills, and learn from one another.

**Annex II – Guidelines for Terminal Evaluation (TE) report preparation and submission to the GEF**

- Listed below, you will find five questions on which Agencies need to report when submitting TEs in the GEF Portal (Annex 1). The information provided should be in the form of few solid paragraphs, up to a page per question maximum. Tables, graphs, etc. are supported by the GEF Portal and can be included in the entry, if applicable.
- In addition to this, at TE stage, Agencies are expected to provide update on co-financing (Annex 2) and core indicators (Annex 3).
- The final version of the TE report itself will also be uploaded and can be referenced in the provided responses. It is **strongly advised** to incorporate the below annexes in the Terms of Reference (TOR) for the TE exercise and have the information readily available (to be directly copy/pasted in the Portal):

**Annex 1**: Answer to five GEF questions needed for GEF Coordination Unit to insert in the GEF Portal when submitting TE reports:

- **Main Findings** of the TE (this could be copy-pasted from the outcomes of the report);
- Information on progress, challenge and outcomes regarding engagement of **stakeholders** in the project/program as evolved from the time of the MTR (Mid-term Review) and based on the description included in the Stakeholder Engagement Plan or equivalent documentation submitted at CEO Endorsement/Approval;
- Information on completed **gender**-responsive measures and, if applicable, actual gender result areas as documented at CEO Endorsement/Approval including gender-sensitive indicators contained in the project results framework or gender action plan or equivalent as well as lesson learned if available;
- Information on the project's completed **Knowledge Management** Approach that was approved at CEO Endorsement/Approval;
- **Lessons learned**.

**Annex 2.** Update on Co-financing table (Table C) since Mid-Term Review (MTR, if applicable), if not applicable, then since CEO Approval/Endorsement (an update to the figures as submitted/approved at CEO stage is expected).

**Annex 3.** Update on Core-indicators since MTR (if applicable), if not applicable, then since CEO Approval/Endorsement. For older projects with Tracking Tools (TT), an update on the TT since CEO Approval/Endorsement and MTR (if applicable) would be required.

Please note that the information provided in Annex 2 and Annex 3 **has to build on the figures** submitted as part of the CEO Approval/Endorsement and the MTR (if applicable).

Once the TE report is finalized and **technically cleared** by the line manager, kindly submit it jointly with Annexes 1-3 to GEF Coordination Unit for further reporting to the GEF.