

# Environmentally sound destruction of PCBs in Brazil

**Review PIF and Make a recommendation**

## Basic project information

**GEF ID**

10368

**Countries**

Brazil

**Project Name**

Environmentally sound destruction of PCBs in Brazil

**Agenices**

UNDP

**Date received by PM**

10/11/2019

**Review completed by PM**

11/1/2019

**Program Manager**

Evelyn Swain

**Focal Area**

Chemicals and Waste

**Project Type**

FSP

## PIF

### Part I – Project Information

#### Focal area elements

1. Is the project/program aligned with the relevant GEF focal area elements in Table A, as defined by the GEF 7 Programming Directions?

#### Secretariat Comment at PIF/Work Program Inclusion

Yes.

## **Agency Response**

### **Indicative project/program description summary**

**2. Are the components in Table B and as described in the PIF sound, appropriate, and sufficiently clear to achieve the project/program objectives and the core indicators?**

### **Secretariat Comment at PIF/Work Program Inclusion**

The project does not present any justification for a second PCB management project in Brazil. It is not clear why the first GEF funded project was not able to adequately address PCBs and how this project would fill any gaps. In this regard it would be difficult to justify providing funds to the same country a second time for the same set of activities while there are other countries that have not yet received funding for PCB management.

The core indicator target is the amount of pure PCB and not PCB contaminated material so the indicator needs to be corrected in 9.1. The tons of PCB contaminated material needs to be placed in 9.6 of the core indicator.

ES, 10/31/19: Please respond to all comments in the agency response in the portal

Please describe how the project will support the full phaseout of PCBs even if only a portion of the PCBs in the country will be address thought this project directly.

ES, 11/1/19: The agency clarified that this proposal will create a business model for the elimination of PCBs in close combination with a focus on enforcement. The project will create the enabling environment that will put Brazil on track to comply with both the 2025 and 2028 targets on PCBs under the Stockholm Convention.

## **Agency Response**

The first PCB project in Brazil was approved in GEF IV and has been under implementation for a long time. The Project implementation was completed in June 2019, and the Terminal Evaluation assessed the project implementation is Marginally Satisfactory. The first phase was focused on the institutional strengthening was mainly focused at the federal level with some specific activities taking with CETESB in Sao Paulo and with pilot activities in 5 states: (1) COPEL- Companhia Paranaense de Energia, (2) CHESF- Companhia Hidro Elétrica do São Francisco, (3) Eletrobrás Distribuição Amazonas; (4) Companhia Estadual de Energia Elétrica – CEEE do Rio Grande do Sul and (5) Eletrobras Distribuição Rondônia - Centrais Elétricas de Rondônia S.A – CERON.

The first phase of the PCB project did not have any specific phase-out target for PCBs and only a limited quantity was destroyed by Private and Public Sector. Therefore, it is conservatively estimated that Brazil still has approximately 40-50,000 MT of PCB containing equipment in the country. This project will aim at addressing all existing PCBs left in the country, but only a part the existing inventory can be eliminated during the lifetime of the project. The remaining part will be destroyed after the project has been completed in line with the Stockholm Convention obligations on PCBs.

The Terminal Evaluation provided 5 recommendations, where #4 and #5 are directly related to a follow up project for PCBs.

- 1) It would be very beneficial to prepare a second Stage for this project as there are still many opportunities to improve the management and disposal of PCBs in Brazil. The first PCB project has prepared the groundwork for the PCB elimination in the coming years in order to put the country well on track with its obligations under the Stockholm Convention on PCBs. In second phase of the PCB project, it would be very important to involve ABRADE and ANEL in the preparation and implementation.
- 2) Intervention would need to be also focused on Private owners of PCB's transformers.

The TE also recommended that a feasibility study for elimination of all PCBs in the country should be performed, if possible. That will allow government to plan for the future based on the understanding about how much PCBs is still left in the country and their cost of elimination. This exercise was previously undertaken in Mexico which is a country with many similarities to Brazil. In the case of Mexico it was proven that the introduction of an integrated management system among PCBs possessor demonstrated that costs could be reduced by 25 % when management and disposal activities were well coordinated among several PCB possessors. It is expected that similar results can be achieved in Brazil and this will be tested in the early stages of the project implementation. It was also concluded that there should be focus on improving the management practices in the workshops that do maintenance of transformers in order to avoid any further cross contamination of PCBs. The second stage (this proposal) has a strong focus on Business Models development which will mobilize the private sector and will generate a sustainable destruction market for PCBs (and other hazardous chemicals).

The Terminal Evaluation noted that "...attention will be required to solve the elimination of PCBs of private holders, in particular public organizations, such as municipalities, public water supply organizations, public hospitals, schools, mainly, some of them classified as sensitive sites..."

Therefore, this project will primarily have a focus on activities related to the management and environmentally sound disposal of PCBs in Brazil and there will be a special focus on sensitive sites (schools, hospitals, small PCB possessors) that will have difficulties in assuring an environmentally sound management and disposal of their PCBs unless they receive some external assistance.

The average cost for Management and Disposal has been estimated at 6 US\$ / kg based on experiences from Mexico and Brazil. The main cost of Management and Disposal of PCBs includes the cost of chemical analysis, decontamination, packaging, transport, logistic, storage, etc. The cost of destruction represents only 15-20 % of the total cost of Management and disposal of PCBs.

The focus of the current project is complementary to the activities implemented in the first PCB project in Brazil and is fully aligned with the recommendations of the Terminal Evaluation. The proposed project will allow the country to achieve large elimination targets in a cost-effective way.

UNDP and the Government of Brazil had consultations with several main stakeholders during the preparation of the PIF. Based on the information provided by one of the main companies that destroys PCBs in Brazil (Hazen Incinerator), it was determined that PCB oils found in recent years still have a relatively large PCB contents (around 500 ppm of PCBs) and they continue to find pure PCBs. Therefore, the quantity of PCB oils to be eliminated under these assumptions is, 4,500 Ton of PCBs contaminated oil. This translates into approximately 100 MT of pure PCBs given that some “pure PCB” transformers have been identified. UNDP has updated the performance indicators 9.1 and 9.6 in the Portal. It will be difficult to calculate the specific target at this point in time as it will require that all potential equipment undergo chemical analysis to determine the specific level of contamination. This estimate will be further refined during the PPG phase.

#### **Co-financing**

**3. Are the indicative expected amounts, sources and types of co-financing adequately documented and consistent with the requirements of the Co-Financing Policy and Guidelines, with a description on how the breakdown of co-financing was identified and meets the definition of investment mobilized?**

#### **Secretariat Comment at PIF/Work Program Inclusion**

Yes, co-financing contains significant investment mobilized, including from the private sector.

ES: 10/31/19:

On co-financing: In-kind co-financing from UNDP has been marked as “investment mobilized”. However, where co-financing truly meets the definition of "in-kind", it should typically be classified as "recurrent expenditures" rather than "investment mobilized". For further details, please refer to the Co-Financing Guidelines ([http://www.thegef.org/sites/default/files/documents/Cofinancing\\_Guidelines.pdf](http://www.thegef.org/sites/default/files/documents/Cofinancing_Guidelines.pdf)).

Also the description on how investment mobilized was identified doesn't respond to the intent of the question – please modify accordingly.

ES, 11/1/19: co-finance table has been updated. However please clarify how investment mobilized was identified.

ES, 1/11/19: Investment mobilized has been clarified.

### **Agency Response**

co-finance table has been updated and in-kind co-finance has been listed as a re-current expenditure.

11/08/19

Response:

The co-financed is new funding that will be used for the management and disposal of the 15,000 MT of PCB contaminated material that will be destroyed during the project lifetime. It does not include funding to replace existing transformers and is only linked with the Management / decontamination/disposal, etc. of PCB contaminated material.

The investment mobilized makes reference to investments that will be done in the future and does not include any past investments. During the PPG phase, the specific amounts of funding and associated quantities of PCB contaminated material will be confirmed via signed co-finance letters.

### **GEF Resource Availability**

**4. Is the proposed GEF financing in Table D (including the Agency fee) in line with GEF policies and guidelines? Are they within the resources available from (mark all that apply):**

### **Secretariat Comment at PIF/Work Program Inclusion**

ES, 10/31/19: Agency Fee and Submission date are missing – please amend.

ES, 11/1/19: Agency fee and submission date have been added.

**Agency Response** Agency fee and submission date has been updated

**The STAR allocation?**

**Secretariat Comment at PIF/Work Program Inclusion**

**Agency Response**

The focal area allocation?

**Secretariat Comment at PIF/Work Program Inclusion**

Yes.

**Agency Response**

The LDCF under the principle of equitable access

**Secretariat Comment at PIF/Work Program Inclusion**

**Agency Response**

The SCCF (Adaptation or Technology Transfer)?

**Secretariat Comment at PIF/Work Program Inclusion**

**Agency Response**

Focal area set-aside?

**Secretariat Comment at PIF/Work Program Inclusion**

**Agency Response**

Impact Program Incentive?

**Secretariat Comment at PIF/Work Program Inclusion**

**Agency Response**

Project Preparation Grant

5. Is PPG requested in Table E within the allowable cap? Has an exception (e.g. for regional projects) been sufficiently substantiated? (not applicable to PFD)

**Secretariat Comment at PIF/Work Program Inclusion**

Yes.



## **Agency Response**

### **Core indicators**

**6. Are the identified core indicators in Table F calculated using the methodology included in the correspondent Guidelines? (GEF/C.54/11/Rev.01)**

### **Secretariat Comment at PIF/Work Program Inclusion**

The core indicator target is the amount of pure PCB and not PCB contaminated material so the indicator needs to be corrected in 9.1. The tons of PCB contaminated material needs to be placed in 9.6 of the core indicator.

ES, 11/1/19: 9.1 and 9.6 have been updated.

## **Agency Response**

Core indicators have been updated

Indicator 9.1 now includes 100 MT of pure PCBs

Indicator 9.6 includes 15,000 MT PCB contaminated material.

### **Project/Program taxonomy**

**7. Is the project/ program properly tagged with the appropriate keywords as requested in Table G?**

### **Secretariat Comment at PIF/Work Program Inclusion**

There is no table G.

## **Agency Response**

### **Part II – Project Justification**

**1. Has the project/program described the global environmental / adaptation problems, including the root causes and barriers that need to be addressed?**

### **Secretariat Comment at PIF/Work Program Inclusion**

Yes.

## **Agency Response**

**2. Is the baseline scenario or any associated baseline projects appropriately described?**

### **Secretariat Comment at PIF/Work Program Inclusion**

It is not clear from the first GEF PCBs project why the phaseout was not met.

ES, 11/1/19: Explanation has been provided.

**Agency Response** As described above, the first PCB project did not have a phase-out target and the focus was at generating a Platform at the Federal level. This proposal will focus on the state level and especially on management and disposal activities in order to put the country well on track to meet its 2025 and 2028 target under the Stockholm Convention for PCBs.

**3. Does the proposed alternative scenario describe the expected outcomes and components of the project/program?**

### **Secretariat Comment at PIF/Work Program Inclusion**

There needs to be a clear justification for a second project.

ES, 11/1/19: Adequate justification has been provided.

### **Agency Response**

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**4. Is the project/program aligned with focal area and/or Impact Program strategies?**

**Secretariat Comment at PIF/Work Program Inclusion**

Yes.

**Agency Response**

**5. Is the incremental / additional cost reasoning properly described as per the Guidelines provided in GEF/C.31/12?**

**Secretariat Comment at PIF/Work Program Inclusion**

Yes

### **Agency Response**

**6. Are the project's/program's indicative targeted contributions to global environmental benefits (measured through core indicators) reasonable and achievable? Or for adaptation benefits?**

### **Secretariat Comment at PIF/Work Program Inclusion**

The core indicator target is the amount of pure PCB and not PCB contaminated material so the indicator needs to be corrected in 9.1. The tons of PCB contaminated material needs to be placed in 9.6 of the core indicator.

ES, 11/1/19: The PIF has been updated.

**Agency Response** Information has been updated in the PIF.

**7. Is there potential for innovation, sustainability and scaling up in this project?**

### **Secretariat Comment at PIF/Work Program Inclusion**

It is not clear if this project will achieve the 2025/ 2028 phaseout targets under the convention.

ES, 10/31/2019: The project needs a clear explanation of how this is to be achieved.

ES, 11/1/2019: The agency clarified that this proposal will create a business model for the elimination of PCBs in close combination with a focus on enforcement. The project will create the enabling environment that will put Brazil on track to comply with both the 2025 and 2028 targets on PCBs under the Stockholm Convention.

**Agency Response**

This project will be implemented over a 5-year period and is expected to be concluded in 2025. This is 3 years ahead of the 2028 deadline for the destruction of all PCBs in Brazil. The stage I proposal created the national platform / institutional framework for the sound management of PCBs at the national level in Brazil. This proposal will follow up with specific on the ground activities at the state level and will focus on creating a business model for the elimination of PCBs in close combination with a focus on enforcement at the state level. The project will create the enabling environment that will put Brazil on track to comply with both the 2025 and 2028 targets on PCBs under the Stockholm Convention. The specific project target of disposing of 15,000 MT of contaminated equipment to prove by example that PCBs can be destroyed more cheaply if there is a close coordination among the PCB possessors combined with strict enforcement. The Business Model with an integrated Management System is key for the success. The sustainability strategy included in the proposal will assure that activities will continue once the project has completed, and thereby lead to the expected outcome.

**Project/Program Map and Coordinates**

Is there a preliminary geo-reference to the project's/program's intended location?

**Secretariat Comment at PIF/Work Program Inclusion**

Yes

**Agency Response**

Stakeholders

Does the PIF/PFD include indicative information on Stakeholders engagement to date? If not, is the justification provided appropriate? Does the PIF/PFD include information about the proposed means of future engagement?

**Secretariat Comment at PIF/Work Program Inclusion**

Yes.

**Agency Response**

**Gender Equality and Women's Empowerment**

**Is the articulation of gender context and indicative information on the importance and need to promote gender equality and the empowerment of women, adequate?**

**Secretariat Comment at PIF/Work Program Inclusion**

Yes.

**Agency Response**

**Private Sector Engagement**

**Is the case made for private sector engagement consistent with the proposed approach?**

**Secretariat Comment at PIF/Work Program Inclusion**

Yes.

**Agency Response**

**Risks**

**Does the project/program consider potential major risks, including the consequences of climate change, that might prevent the project objectives from being achieved or may be resulting from project/program implementation, and propose measures that address these risks to be further developed during the project design?**

**Secretariat Comment at PIF/Work Program Inclusion**

Climate risks are not identified.

ES, 10/31/19: Climate risk screening should be identified for all GEF projects, including chemicals and waste. The STAP is doing some work on what types of issues should be looked at for Chemicals and Waste projects.

ES, 11/1/19: Climate risks have been evaluated and will also be looked at during PPG.

### **Agency Response**

This project will aim at assisting Brazil in achieving its 2025 and 2028 targets on PCB management and Destruction under the Stockholm Convention. The timeframe is therefore 9 years for the interventions in the country in order to comply with the Stockholm Convention obligation.

The initial analysis of Climate Risks from increased temperatures and/or increased climate variability (increased risk of rainfall or drought, etc.) have indicated that given the relatively short time frame (9 years) of the total intervention (compliance with 2028 Stockholm Convention end date for PCBs), it has been concluded that the potential impacts are low (within this period) and the probability of it to happen is also considered low. Climate stressors are not expected to have a significant effect on the overall system within the timeframe of this intervention. The Climate Risks will be further analyzed during the PPG phase and updated, if needed.

### **Coordination**

**Is the institutional arrangement for project/program coordination including management, monitoring and evaluation outlined? Is there a description of possible coordination with relevant GEF-financed projects/programs and other bilateral/multilateral initiatives in the project/program area?**

### **Secretariat Comment at PIF/Work Program Inclusion**

As the agency knows, the implementation and execution roles on GEF projects are meant to be separate per policy and guideline. The GEFSEC will analyze any requests for dual role playing by an agency at the time of CEO endorsement and only approve those cases that it deems warranted on an “exceptional” basis. We strongly encourage the agency to look at third party options as a preferred way forward. We also strongly encourage the agency to discuss any and all options for execution that do not include the government with the GEFSEC early in the PPG phase. The technical clearance of this PIF in no way endorses any alternative execution arrangement.



**Agency Response** This is noted. UNDP will be in close communication with the GEF Sec during the PPG phase to address this issue.

**Consistency with National Priorities**

**Has the project/program cited alignment with any of the recipient country's national strategies and plans or reports and assessments under relevant conventions?**

**Secretariat Comment at PIF/Work Program Inclusion**

Yes.

**Agency Response**

**Knowledge Management**

**Is the proposed "knowledge management (KM) approach" in line with GEF requirements to foster learning and sharing from relevant projects/programs, initiatives and evaluations; and contribute to the project's/program's overall impact and sustainability?**

**Secretariat Comment at PIF/Work Program Inclusion**

Yes.

**Agency Response**

**Part III – Country Endorsements**

**Has the project/program been endorsed by the country's GEF Operational Focal Point and has the name and position been checked against the GEF data base?**

**Secretariat Comment at PIF/Work Program Inclusion**

Yes.

## **Agency Response**

Termsheet, reflow table and agency capacity in NGI Projects

Does the project provide sufficient detail in Annex A (indicative termsheet) to take a decision on the following selection criteria: co-financing ratios, financial terms and conditions, and financial additionality? If not, please provide comments. Does the project provide a detailed reflow table in Annex B to assess the project capacity of generating reflows? If not, please provide comments. After reading the questionnaire in Annex C, is the Partner Agency eligible to administer concessional finance? If not, please provide comments.

## **Secretariat Comment at PIF/Work Program Inclusion**

## **Agency Response**

GEFSEC DECISION

RECOMMENDATION

Is the PIF/PFD recommended for technical clearance? Is the PPG (if requested) being recommended for clearance?

## **Secretariat Comment at PIF/Work Program Inclusion**

PIF clearance is not recommended at this time.

ES, 11/7/19: Clarification on how investment mobilized was identified is required.

ES, 11/11/19: the PIF is recommended for technical clearance.

ADDITIONAL COMMENTS

Additional recommendations to be considered by Agency at the time of CEO endorsement/approval.

Secretariat Comment at PIF/Work Program Inclusion

Review Dates

	PIF Review	Agency Response
First Review		
Additional Review (as necessary)		
Additional Review (as necessary)		
Additional Review (as necessary)		
Additional Review (as necessary)		