#### STAP SCREENING TEMPLATE

GEF ID	11749
Project title	Global Elimination Program for PCBs (GEP-PCB)
Date of screen	29 November 2024
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#### 1. Summary of STAP's views of the project

The motivation for this project comes from the need for signatories to the Stockholm Convention (SC) to meet their obligations, notably the 2025 deadline for removing PCBs from use and their environmentally sound management (ESM) by 2028. A major strength of, and innovation by the project, is connecting PCB elimination with the energy sector investments (specifically with transmission and distribution), resulting in the significant benefit of improving the efficiency of electricy grids and thereby reducing GHG emissions. As such, the program is anticipated to deliver not only on destroying PCBs (GEB indicator 9), but also reducing GHG emissions (indicator 6). It is also important that the proposal includes country-appropriate plans for the final destruction of PCBs and not storage which has and continues to result in PCB emissions and mishandling.

The project is comprised of a Global Coordination program and, at this point, 6 child projects. Oveall, the project seeks efficiencies and scalability through the use a Standardized Template Approach or STA to embed ESM into electricity transmission and distribution (T&D) projects that could receive support from multilateral development banks (MDBs) and other GEF implementing agencies. Further efficiencies are sought by taking cooperative approaches for procuring PCB treatment and disposal services. The proposal strikes a balance between providing centralized expertise and services (e.g., PCB testing) with de-centralized child projects tailored to the needs of individual countries and their electricity sectors.

STAP supports this well design proposal, borne out of many years of experience in working towards the ESM of PCBs. In particular, STAP supports the innovative project design that links the ESM of PCBs with upgrading electricity systems that is intended to unlock private finance. The project design is scalable and has the enduring benefit of improving electricity systems in participating countries. STAP suggests that the proposal would benefit from expanding on several descriptions and providing additional clarifications, including with respect to assumptions in the theory of change, as noted in Sections 2 and 3.

Note to STAP screeners: a summary of STAP's view of the project (not of the project itself), covering both strengths and weaknesses.

### STAP's assessment\*

- Concur STAP acknowledges that the concept has scientific and technical merit
  Minor STAP has identified some scientific and technical points to be addressed in project design
- D Major STAP has identified significant concerns to be addressed in project design

Please contact the STAP Secretariat if you would like to discuss.

#### 2. Project rationale, and project description – are they sound?

See annex on STAP's screening guidelines.

1. **Systems thinking** is the basis of leveraging the benefits of upgrading electricity grids while removing PCBs from old equipment in the system. Systems thinking also comes in prioritizing local or regional PCB handling rather than transporting them during which midhandling could occur. The boundaries circumscribing the system are appropriate by including waste management, electricity utilities and financial institutions, with the boundaries expanded to include a wide range of stakeholders.

2. **Baseline, barriers and enablers** are all considered. Improving the baseline comes from updating PCB inventories and are now incomplete. The program is built on overcoming barriers that are explicitly articulated in the ToC, e.g., enabling PCB ESM by connecting this expensive activity with upgrading electricity systems. Enablers are implicitly considered, e.g., the appetite of electricity system utilities to sign-on to this program.

3. **Uncertain futures** are considered in terms of the failure of countries to meet their SC obligations, but not explicitly with respect to changes in assumptions, drivers, etc. To some extent the implications of uncertain futures comes in the risk analysis.

4. **Theory of Change (ToC)** is adequate and includes barriers and assumptions related to causal pathways that connect outputs to outcomes of the global coordination and child projects, which in turn are needed to achieve outcomes, and the objective and goal of the global program (to deliver the GEBs for destroying PCBs and increasing energy efficiency of electricity systems). The barriers are addressed by the global and child project outputs and outcomes. Enabling elements are not explicitly addressed but are implicit in the causal pathways, e.g., advantages to electricity utilities of upgrading their equipment to improve the efficiency of electricity grids. The drivers of the ToC are explained elsewhere, specifically meeting the Stockholm Convention deadlines for ESM of PCBs.

A weakness in the theory of change is the need for a more rigorous set of assumptions. For example, one assumption is that "PCB components can be added to investment operations, including financing for new equipment", but the possibility of integrating ESM of PCB into energy investments is the main thrust and basis for the project; so this shouldn't be an assumption. It should have been ascertained that this is possible before developing the project. Another assumption is that "GEF provides adequate funding for PCB validation, removal, transportation, and destruction". It is unclear why this should be an assumption. Will not the GEF be providing funding based on the amount requested in this PIF once this project is approved by the GEF Council? What other adequate GEF funding is being assumed? The third assumption in the ToC says "operational teams have access to governments and companies and can secure cooperation by offering an integrated solution". It is unclear what "access to government" means. Are the relevant national government departments not already on board with the project at this stage? Given that the success of the project is contingent on government and companies' cooperation, what happens if this assumption does not hold? Overall, STAP recommends that this aspect of ToC to be revisit and thought through more rigorously.

#### 5. Project Components

1. Enhancing the enabling environment for PCB elimination, including strengthening the regulatory environment if necessary, updating and improving inventories, and developing elimination plans. This component will draw on past experiences and expertise.

2. Developing and implementing child projects in 6 countries, with outcomes of replacing PCB-containing equipment and then treating and disposing of PCBs. ESM measures will prioritize in-country treatment, followed by taking a regional approach and with treatment abroad as a last resort. Individual projects at the company level will undergo an analysis of options, including a cost-benefit analysis.

3. Program coordination, knowledge management and stakeholder engagement.

6. **Sectors and stakeholders** will be engaged as a Stakeholder Enagement Plan is developed. Stakeholders will be involved in inception, mid-term and completion workshops, as well as regional workshops that are planned. Analysis of the gender relevance of the program is reasonable since women should be represented in stakeholder consultations and other aspects of the global coordinating and child projects. To date, 4 regional stakeholder workshops have been held with PCB experts from governments, utilities and World Bank energy sector specialists.

7. **Contribution to GEBs** is expected to come from indicator 9.1 for the removal and disposal of POPs, and indicator 6 for reduced GHG emissions and energy saved. The project will also contribute to indicator 11 of people benefitting from reduced potential for exposure to PCBs. The estimates of GEBs are substantial. However, whilst the child projects provide information on methodologies (e.g., UNEP's cost effectiveness model) and sources of data, the proposal needs to provide more details of how the numbers were arrived at, including the underlying assumptions used in calculating the expected GEBs (done averagely well for some child projects compared to others). This is particularly important given that the proposal acknowledges that several country "NIPs have significant data inconsistencies and gaps..." with "such inconsistencies and gaps in country-specific PCB inventory data making it challenging to establish national baselines of PCB containing equipment..." Are the estimated GEBs based on these inconsistent data? It is also observed that different methods are being use for GEB estimations depending on the GEF Agency leading the child project. It is essential, including for knowledge management, learning, and adaptive management, that there is consistency or a way of aligning methodologies and metrics. STAP recommends that these issues be addressed as the proposal is further developed.

8. **Policy coherence** will be addressed on an "as needed basis" for individual child project, e.g., does the country require the strengthening of policies and regulations related to PCBs, hazardous waste and controlling the transboundary movement of hazardous waste? Several child projects do include activities related to policy coherence under Component 1.

9. The project **aligns with current GEF and other investments** such as the World Bank's analytical and advisory project. The project preparation phase will be conducted by the World Bank through an "Advisory Services and Analytics" operation that will assist with developing tools and approaches, engaging stakeholders, and engaging with GEF agencies.

10. **Knowledgement management (KM)** for the Global Coordination program is briefly explained as part of component 3. KM is essential for exchanging information among child projects on, for example, best practices and ensuring comparability of monitoring activities, as well as for adaptive management and replication and scaling elsewhere. STAP encourages the proponent to better incorporate knowledge management and learning into the project and to develop a rigorous plan on using the output to promote replication and scaling.

11. Innovation and scalability. The STA approach is deliberately intended for scalability. Also, the intentions of pre-negotiating conditions for ESM with service providers will scale to future child projects. Innovation comes from linking PCB removal with improvements to electricity systems: the innovation is bringing in the "carrot" to enable finance and deliver multiple project benefits, whereby past efforts have relied on "sticks" of regulatory compliance with mixed success.

12. **Monitoring and evaluation.** Monitoring is planned to be semi-annual and evaluation as part of a midterm review. These activities will comply with the World Bank and GEF requirements. Monitoring will be designed to allow for reporting of GEBs, as well as other aspects such as progress on implementation and gender-inclusion. Each child project will develop a monitoring plan, presumably based on plans provided by the Global Coordiation project and delivered through the KM platform.

13. **Risks.** In response to rating environmental risk high, the project intends to develop a full environmental and social risk assessment to inform appropriate mitigation measures. The risk is considered high to companies of securing financing for replacing PCB-contaminated equipment. This risk is included as an assumption in the ToC along with measures to mitigation the risk. Another financial risk is related to the cost of PCB treatment, transportation and disposal. It is reasonable that Components 1 and 2 consider this latter risk and again, includes mitigation measures, e.g., "pre-negotating quantities, prcies and other conditions with global or regional providers".

Note: provide a general appraisal, asking whether relevant screening guideline questions have been addressed adequately – not all the questions will be relevant to all proposals; no need to comment on every question, only those needing more attention,

noting any done very well, but ensure that all are considered. Comments should be helpful, evaluative, and qualitative, rather than yes/no.

#### 3. Specific points to be addressed, and suggestions

In addition to addressing the points raised in Section 2 above, the proposal could benefit from providing some additional information and clarifications as listed below:

1. The proposal should clarify what could be seen as an inconsistency in Activity 1.3 about involving major global hazardous waste companies which could entail transboundary shipments to centralized destruction facilities (described on p 7 of the Child Projects document) vs component 2 that emphasizes country, or if not, regional service providers (in PFD, see below under Outcome 2.2).

2. Outcome 2.1.1 How will this cost-benefit analysis be conducted and how sensitive are the outcomes to underlying assumptions, costs, etc.?

2. Outcome 2.2. The proposal expects that PCB treatment will be done by "qualified and eligible companies as cost-effectively as technology as well as local circumstances and market conditions allow". The proponent should consider adding this as an assumption to the ToC. Is there concern over market distortions (i.e., cost inflation) because of the potential for public financing?

What approach will be used to test whether individual cement kilns can be used for high-temperature incineration of PCBs? For example, hexachlorobenzene could be produced from high-temperature incineration (Ahling and Lindskog 1978 <a href="https://doi.org/10.1016/0048-9697(78)90049-9">https://doi.org/10.1016/0048-9697(78)90049-9</a>).

3. Outcome 3.1. Who is envisaged for inclusion in the National PCB Committees?

4. More details could be provided on what will be monitored and how monitoring results will be comparable across the child projects.

Note: number key points clearly and provide useful information or suggestions, including key literature where relevant. Completed screens should be no more than two or three pages in length.

\*categories under review, subject to future revision

#### ANNEX: STAP'S SCREENING GUIDELINES

# **Project rationale**

- How well does the proposal explain the problem and issues to be addressed in the context of the system within which the problem sits and its drivers (e.g. population growth, economic development, climate change, sociocultural and political factors, and technological changes), including how the various components of the system interact?
- 2. Does the project indicate how **uncertain futures** could unfold (e.g. using simple **narratives**), based on an understanding of the trends and interactions between the key elements of the system and its drivers?
- 3. Does the project describe the **baseline** problem and how it may evolve in the future in the absence of the project; and then identify the outcomes that the project seeks to achieve, how these outcomes will change the baseline, and what the key **barriers** and **enablers** are to achieving those outcomes?
- 4. Are the project's **objectives** well formulated and justified in relation to this system context? Is there a convincing explanation as to **why this particular project** has been selected in preference to other options, in the light of how the future may unfold?
- 5. How well does the **theory of change** provide an "explicit account of how and why the proposed interventions would achieve their intended outcomes and goal, based on outlining a set of key causal pathways arising from the activities and outputs of the interventions and the assumptions underlying these causal connections".
  - Does the project logic show how the project would ensure that expected outcomes are **enduring** and resilient to possible future changes identified in question 2 above, and to the effects of any conflicting policies (see question 9 below).
  - Is the theory of change grounded on a solid scientific foundation, and is it aligned with current scientific knowledge?
  - Does it explicitly consider how any necessary **institutional and behavioral** changes are to be achieved?
  - Does the theory of change diagram convincingly show the overall project logic, including causal pathways and outcomes?

- 6. Are the project **components** (interventions and activities) identified in the theory of change each described in sufficient detail to discern the main thrust and basis (including scientific) of the proposed solutions, how they address the problem, their justification as a robust solution, and the critical assumptions and risks to achieving them?
- 7. How likely is the project to generate global environmental benefits which would not have accrued without the GEF project (**additionality**)?
- 8. Does the project convincingly identify the relevant **stakeholders**, and their anticipated roles and responsibilities? is there an adequate explanation of how stakeholders will contribute to the development and implementation of the project, and how they will benefit from the project to ensure enduring global environmental benefits, e.g. through co-benefits?
- 9. Does the description adequately explain:
  - how the project will build on prior investments and complement current investments, both GEF and non-GEF,
  - how the project incorporates **lessons learned** from previous projects in the country and region, and more widely from projects addressing similar issues elsewhere; and
  - how country policies that are contradictory to the intended outcomes of the project (identified in section C) will be addressed (**policy coherence**)?
- 10. How adequate is the project's approach to generating, managing and exchanging **knowledge**, and how will lessons learned be captured for adaptive management and for the benefit of future projects?

## 11. Innovation and transformation:

- If the project is intended to be **innovative**: to what degree is it innovative, how will this ambition be achieved, how will barriers and enablers be addressed, and how might scaling be achieved?
- If the project is intended to be **transformative:** how well do the project's objectives contribute to transformative change, and are they sufficient to contribute to enduring, transformational change at a sufficient scale to deliver a step improvement in one or more GEBs? Is the proposed logic to achieve the goal credible, addressing necessary changes in institutions, social or cultural norms? Are barriers and enablers to scaling be addressed? And how will enduring scaling be achieved?
- 12. Have **risks** to the project design and implementation been identified appropriately in the risk table in section B, and have suitable mitigation measures been incorporated? (NB: risks to the

durability of project outcomes from future changes in drivers should have been reflected in the theory of change and in project design, not in this table.)