

STAP SCREENING TEMPLATE, OCTOBER 2022

GEF ID	11450
Project title	Support to the Productive Development Bank for the deployment of the Eco-efficiency Credit Programme in Bolivia
Date of screen	26 May 2023
STAP Panel Member	Ngonidzashe Chirinda and Miriam L Diamond
STAP Secretariat	Sunday Leonard

1. Summary of STAP's views of the project

The proposal adequately articulates the problem and solutions to address the challenge of limited resources for supporting scaling of low emission (LE) and low pollution (LP) technologies. The proponents aim to provide technical assistance to support the scaling of best available technologies (BAT) and best environmental practices (BEP) in micro, small, medium, and large enterprises.

It is good to see a clear focus on how the proponents focus on increasing energy efficiency (EE), generating energy from renewable sources, and reducing pollution. The proponents include a good theory of change, including many assumptions, risks, and barriers, as well as clear pathways and outcomes, particularly as related to EE. However, the theory of change could be improved by better considering elements related to reducing pollution emissions especially as related to waste handling. It is also good to see a clear goal statement that justifies the approach well. The strategic choices of focusing GEF resources on developing technical expertise for planning, programming, and implementing LE and/or LP technologies, designing and implementing eco-efficient credit lines, working on the regulatory environment, and knowledge management and sharing will enable project impacts beyond the project period.

Fossil fuel subsidies in Bolivia are a barrier to scaling the proposed options. However, the proponents need to explore innovative approaches to incentivize the adoption of energy-use-efficient technologies, renewable energy sources, and the circular economy. It will be necessary that deploying renewable energy technologies (e.g., solar panels) does not result in deforestation or land-use conflicts with arable land, which would affect the achievement of food security goals. The circular approach should also include the responsible reuse or disposal of renewable energy technologies. A low-cost approach would be to select technologies designed with a circularity philosophy.

The project should consider how financial instruments could promote safe waste handling since safe handling does not come with financial rewards (unless the regulatory system is able to penalize unsafe handling, but this is not presently the case) and costs of unsafe handling are externalized. The project should also provide more details about plans to reduce POPs emissions, such as those from WEEE because proper disposal is expensive and does not come with financial rewards.

STAP considers that this project has the potential to provide a model of how eco-efficient credit lines can be deployed to support the transition towards LE and LP futures in countries with fossil fuel subsidies.

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

X Minor - STAP has identified some scientific and technical points to be addressed in project design

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.

This project has two main goals. First, it aims to concretize climate action, reduce waste, and improve its management in Bolivia. Aligning this project with The Banco de Desarrollo Productivo's Eco-Efficiency Programme should accelerate progress towards closing financial and non-financial barriers. Working towards a future in which renewable energy sources are equally or more competitive than fossil-fossil fuels will contribute towards generating climate change mitigation GEBs. However, more context-specific innovations are needed to out-compete subsidized fossil-fuel-based energy sources to achieve the transition towards renewable energy sources. The second focus is on reducing pollution and promoting a circular economy that supports GEBs linked to chemicals and waste.

The theory of change, as it is related to the energy side, is well-written and comprehensive and clearly shows how identified barriers will be tackled, as well as the expected outputs, outcomes, and overall goal. The goal is well-articulated, and the project is designed around a clear narrative. However, some of the logic could be improved, for example, by questioning whether "limited information and data related to LE/LP technologies and measures" impede the adoption of those technologies, especially regarding waste generation. A significant and critical barrier to adopting LP technologies is that costs (e.g., adverse health effects) are externalized. Thus, limited financial incentives exist outside of avoiding fines levied through a regulatory system. Of course, this barrier broadly pertains to the "chemicals & waste" area, not just to this project. However, this barrier needs to be clearly articulated to understand which levers and instruments could aid with environmentally sound waste management. Thus, the theory of change correctly identifies the barrier of a regulatory framework with limited incentives for sectoral adoption of LE/LP technologies. A related barrier is not a lack of regulation but weak implementation and enforcement. The proposal should explicitly address how these weaknesses will be addressed.

The project's value in supporting capacity development is well articulated. The built capacity will benefit other future climate action, chemicals, and waste management initiatives. A bank investing in building its in-house technical capacities is good for other LE and LP future credit facilities.

The proponents clearly understand the "elephant in the room"—fuel subsidies. However, the project will need to go further and explore additional options for incentivizing a transition to renewables and energy efficiency technologies. It also needs to explore additional context-appropriate incentives for sustainable pollution management. Institutional innovations and behavioural changes may be necessary to enable effective policing of enacted policies to support the transition to LE and LP futures. See the STAP report on [behaviour change](#) to explore approaches for incentivizing behavioural change.

Another "elephant in the room" is the difficulties with financing environmentally sound hazardous waste management and disposal since there is no direct "economic value" to these activities. The logic needs to be laid out for the financial benefit related to "inventorize, repack, transport and dispose of 615 tones of POPs pesticides" to make a green credit line an effective instrument. (e.g., Component 1). The logic supporting financing for the safe handling of WEEE is lies with the recovery and sale of valuable elements (e.g., copper), but it not clear for the safe handling of contaminated plastics from WEEE (e.g., how are those plastics identified, what happens to those plastics contaminated with POP PBDEs).

The project should consider developing reasonable and implementable monitoring reporting and verification (MRV) systems. It is also good to see that the proponents will delve into policy coherence issues to support the transformation of chemical manufacture, use, and management to eliminate waste and minimize chemical pollution.

Despite competition from subsidized fossil-fuel-based energy sources, the project is designed to support increased adoption of LE energy and energy-efficient technologies. The proponents clearly understand the

context in which they will operate. Focusing on renewables and energy-efficient technologies aligns with current scientific knowledge on climate action investment priorities. The project proponents may need to consider the potential resistance to change to renewables and energy-efficient technologies as a possible risk and thus explore measures to increase the competitiveness of renewable energy systems.

It is also positive to see the efforts to leverage other current and previous initiatives and focus on building capacities to support the achievement of paradigm shifts at different scales. Exploring innovations such as [agrivoltaics](#) is essential to ensure that the expansion of renewables does not increase deforestation, especially in a country where deforestation is [high](#), primarily due to the expansion of agricultural lands.

The fact that the proposed project will be co-implemented with an eco-efficiency credit facility will increase skilled human resources that are sufficiently competent to inform the resource flows towards best-bet climate action and low-pollution technologies. The proponents may need to consider system and technology designs to accelerate progress toward pursuing a circular approach. For instance, end-of-life management actions should be deeply explored for renewables and energy-efficient technologies in parallel with improving the handling of WEEE. See the [STAP report on circular economy and climate change](#) for insights on supporting circular economy approaches for renewables.

The estimate of GEB of GHG emissions reductions is well explained. However, there is a need for additional information on the parameters used and the assumptions made. More clarity is needed on how indirect emissions reduction benefits were estimated. Further explanations regarding assumptions behind the estimates of POPs air emissions, POPs/Hg containing materials, and products directly avoided are needed. How will Stockholm-listed PBDEs (one class of brominated flame retardants) be avoided – what will happen to the WEEE plastics containing PBDEs? How will emissions from cement plants be avoided, and is it reasonable to scale up estimates based on 20 years? How will metals be recovered from WEEE cables to prevent open burning? Which POPs will be avoided, and how will they be avoided using water treatment plants for textile production?

The section on possible risks to the project preparation and implementation requires some additional work. For instance, climate risk does not only affect farmers, but the discussion should be expanded to include other sectors. Environmental and social risks need better articulation. Consider disaggregating the risks as proposed by [STAP](#).

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

STAP recommends addressing the issue discussed in Section 2 above, and specifically the following:

1. Consider financial innovations to improve the competitiveness of renewables and incentivize the scaling of energy-efficient technologies.
2. Consider institutional innovations to support the policing of enacted regulations.
3. Focus on upstream circular economy solutions in designing renewable energy systems and selecting energy-efficient technologies. Credit lines will also need to support innovations aimed at end-of-life management systems. Learning from WEEE handling should inform this analysis since WEEE handling continues to be financially and environmentally expensive.
4. Provide details on GHG emissions and avoided POP release estimation approaches and the underlying assumptions.
5. Consider revisiting the section on project preparation and implementation risk.

6. Better define the problems with hazardous pesticides by distinguishing the legacy problem of disposing of pesticides designated under the Stockholm Convention vs disposal of hazardous materials related to the current use of pesticides. Also, more clearly distinguish challenges related to hazardous vs household waste.
7. Provide details on what activities and sectors will be targeted for interventions aimed at reducing emissions of POPs/mercury. Some details were listed under the explanation of how GEBs were calculated and the discussion of risks, but they do not come with enough explanation or context to understand the likelihood of success. For example, the risk section mentions that borrowers who receive credit are required to show that waste is disposed of using environmentally sound management. Is a system in place whereby such assurances can be obtained? How will the project encourage environmentally sound handling of WEEE?

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

1. 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.)