REVISED STAP SCREENING TEMPLATE

GEF ID	11211
Project title	Shifting to Zero Waste Against Pollution (SWAP) initiative
Date of screen	14 June 2023
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1. **Summary of STAP's views of the project**

The "shifting to zero waste against pollution" project seeks to reduce and manage the ever-growing volume of waste in 4/5 cities across different parts of the developing world. The detailed proposal provides useful analyses of the challenge, including interlinkages with underlying root causes, such as increasing incomes (i.e., more purchasing power), urbanization, poverty, and infrastructure development. However, the proposal needs to adequately address how trends and interactions among broader system drivers outside the control of the project (e.g., population growth, economy, climate change, political priorities, etc.) and their uncertainties could unfold and affect project objectives.

The project builds from previous and ongoing efforts that target activities primarily at the municipal level and aligns with GEF integrated programs, including circular plastics, chemical supply chains, and sustainable cities; hence need to consider how to ensure synergy and cross-pollination. UNDP has chosen four cities (one more to be added to make 5) to pilot circular economy-based waste management activities with the goal of scaling up to other cities. The cities all have high waste production rates, but 3 of 4 currently selected cities have high collection rates, so the premise for the choices of these cities (i.e., lack of waste management) could be better justified.

The project is ambitious, including activities from upstream efforts to reduce waste by promoting circularity to downstream efforts to adequately dispose of hazardous waste (actually, that wasn't well described, e.g., mercury).

Some aspects of the theory of change and project components need to be strengthened. Also, the basis and assumptions used in estimating the expected Global Environmental Benefits needs to be made more explicit.

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**

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. System. The situation concerning waste is well described with useful statistics. It also addresses the interlinkages with the economy, income, and poverty. The system could be better described in terms of economic analysis of externalizing costs and impacts from waste and the vexing problem of internalizing those costs while following a "polluter pays" principle. It is useful to understand the system in terms of supply-demand. On the supply side, the lack of lifecycle considerations uncouples production from waste management costs (e.g., externalizing costs for producers). However, the project appears to emphasize behavioural change among consumers and society as a whole or the demand side. Behaviour change is needed to address supply (too much waste produced) and demand (consumer driven).

2. The baseline of the problem and barriers were described, including for each selected city (Table 1). The proposal would benefit from a discussion of enabling elements. The project activities are based on local needs. The analysis of "lessons learned" should account for key characteristics of each city that could delay or reduce

effectiveness, i.e., analysis of city-specific barriers and enablers. Also, the project needs to consider factors that limit controls at the city level).

3. Uncertain future: the proposal noted the root causes of the waste management challenge and the barriers to achieving zero waste (i.e., issues that the project could address) but did not adequately discuss how trends and interactions among broader system drivers outside the control of the project (e.g., population growth, economy, climate change, political priorities, etc.) and their uncertainties could unfold and affect project objectives. The trends and interactions between these drivers are outside the control of the project but could affect the success; hence it is essential to consider this before designing interventions. The project needs to consider some plausible narratives of how these drivers may unfold and test proposed interventions against these futures to ensure the interventions will work (i.e., are robust to future changes).

4. Objectives: The project was justified in terms of low formal waste collection, yet 3 of the 4 cities for which data was presented have MSW collection rates >80%. Only Freetown has a low collection rate. The proposal needs to be clear on specific objectives for other cities, e.g., how to reduce the significant amount of waste going into landfills (75% and above for Grand Tunis, Kocaeli, and Greater Montevideo).

5. Theory of Change (ToC):
- Enduring change is sought by prioritizing measures to increase circularity, but need to focus more on the highest rung of the waste hierarchy ladder of reducing production and consumption.
- Institutional & societal behavioural change sought through multiple avenues, such as using mayoral authority to convene steering committees, engage community associations & civil society, build capacity, green procurement guidelines for the public sector, etc.
- Root causes included, but the central problem of externalizing costs of waste generation by producers and suppliers needs to be emphasized more. Outputs related to policy, legal & regulatory frameworks could improve emphasis on source reduction.
- The causal pathways leading to impacts are not presented in the ToC
- The assumptions underlying the ToC are missing; for example, what are the things (assumptions) that must happen for the developed zero waste framework to lead to reduced chemical pollution and decoupled economic activities from waste? Each causal pathway (from activities to outputs to outcomes to impacts) should have underlying assumptions.
- Could seeking investment for PPP to cover city waste management result in a perverse incentive by not focusing on upstream source reduction?
- Given that each country has unique challenges, should the current ToC apply the same way to each city, or should it be tailored to each country's circumstances?

6. Components. The proposal provided a detailed description of the project components that range in covering integrated planning and programming (including policy, legal and regulatory frameworks), to sustainable financial instruments, to sustainable production and consumption, along with material management and Knowledge Management. The rationale behind some components could be strengthened with the following examples.
- Component 1 did not consider how hazardous waste would be dealt with, e.g., mercury, POPs.
- Component 2 – good to seek financing mechanisms for infrastructure. Consider reviewing the following publications from OECD, Ocean Conservancy, World Bank, Bharadwaj, et al., ADB Institute, and IBRD/World Bank, for insights on financing waste management infrastructure in developing economies.
- Component 2: good that the project intends to evaluate currently in-place incentives to discourage or eliminate unfavorable ones. It is essential to focus on incentives and undertake a full-fledged policy coherence analysis in each country to identify contradictory policies and gaps across economic sectors and align them to achieve sustainability objectives.
- What is the basis for selecting the sectors for pilot activities? Does the selected sector apply across the 4/5 cities? Or would each city choose the most important sector to focus on, or would all cities address all sectors? How about sectors with organic waste (e.g., agro-industries) which is part of the waste mix in all

countries? These sectors overlap with those of the integrated programs (chemical supply chain, circular plastics, and sustainable cities). How will synergy and cross-pollination be ensured?

- Component 3, is building capacity among industries to promote cleaner production in the largely multi-national electronics and textile sectors feasible? Ecolabelling and sustainable certification require significant investment and time to develop. How can these instruments, implemented within the scope of this project, lead to a substantial change in consumer behaviour in the sectors identified?
- Component 5 involves knowledge management – how will best practices be determined, and how will practices be chosen for scale-up? Incomplete description of how awareness (awareness of what?) can be achieved with informal sector workers, e.g., waste pickers and e-waste dismantlers.

7. Project has the potential to contribute to GEBs of reduced GHG emissions, reduced U-POPs and Hg, and avoided plastic waste. But the estimate of all GEBs needs to be clarified. What is the basis for the assumed 25% reduction in emissions from waste management and the 2.5MtCO2e accrued value? What is the basis for the 25% reduction in materials containing POPs/Hg or the estimation that the project will avoid at least 20% plastic waste or a 25% reduction in uPOPs release?

The project could also generate local environmental co-benefits such as reduced pollution in air, land, and water and reduced contamination of agricultural produce and livestock, as well as socioeconomic benefits such as job creation, enhanced livelihoods and income, gender equality, and improved health. These co-benefits need to be tracked to provide a holistic picture of the return on GEF's investments.

8. Project has consulted with municipalities, other agencies, and groups. More information could be provided on how some groups will be engaged, such as informal waste workers, supermarkets, and healthcare facilities.

9. As noted earlier, the project overlaps with current GEF investments and aligns with GEF-8 activities. More information could be provided on how lessons will be learned and how those lessons learned will feedback to the project (D3 lists adaptive management but not the mechanism to achieve adaptive management). The proposal speaks to the experiences of Tianjin Eco-city, the Chinese government's "zero-waste city," but not on what has and has not been successful and why and how this should inform the proposed project.

10. Component 5 (D) and E includes KM activities which are mostly outward facing. Presumably, the project will ensure knowledge exchange with stakeholders, i.e., learning, not just dispensing knowledge.

11. Innovation presumably lies in assembling and implementing project components aimed at cities, where those components include upstream and downstream elements, key players (p33), carrots (incentives) and sticks (regulations), piloting activities, capacity building, raising awareness, and behaviour change. The project will presumably tailor fine-grained needs and activities according to those of each city. An analysis of lessons learned could be tailored to the key characteristics of each city so that activities can be successfully transplanted and scaled up elsewhere.

12. The project analyzes risks, but some of the identified risks (e.g., change in government, political instability, and macroeconomic concerns) ought to be dealt with in the fundamental design of the response to the problem by the project rather than in a post hoc risk assessment about implementation. Hence, this analysis could be folded into a narrative of plausible futures and the development of the theory of change. This further emphasizes the need for developing simple future narratives and a robust theory of change.

3. Specific points to be addressed, and suggestions

STAP recommends the following to improve the proposal further:
1. Develop a narrative of plausible futures that considers the potential effects drivers of change and their associated uncertainties on achieving the project's goal and use this to inform intervention options. See STAP's primer on future narratives for more guidance.

2. Improve the theory of change based on comments in point 5 in Section 2
3. Enhance the project components based on comments in point 6 of Section 2
4. Undertake a policy coherence analysis to understand where conflicting policies can hinder the achievement of the expected outcomes and ensure these are addressed appropriately. See STAP's paper on policy coherence for more guidance.
5. Provide clearer information on the data and assumptions used in estimating the GEBs
6. Make provisions for tracking, measuring, and reporting these and the socioeconomic co-benefits in place. Please see STAP's recent paper on incorporating co-benefits in GEF's investments for guidance.
7. Provide more information on how lessons will be learned from ongoing GEF investment and zero-waste initiatives elsewhere and how those lessons learned will feedback to the project.

*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. 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?

8. 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**)?

9. 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?

10. 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?

11. 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.)