

REVISED STAP SCREENING TEMPLATE, OCTOBER 2022

GEF ID	11865
Project title	Dominica Geothermal Risk Mitigation II Project: Additional Financing and Guarantee
Date of screen	22 May 2025
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1. Summary of STAP's views of the project

This project aims to address the financial challenges stalling progress in the Dominica Geothermal Risk Mitigation II Project. The proponents aim to use grants and NGI resources to support the completion of the project and provide payment guarantees. The ultimate goal is to increase the amount of geothermal energy (renewable energy) in the energy mix, increase Dominica's energy independence, support it in meeting its NDC targets, and improve its energy sector's resilience.

The proposed geothermal technology is well-established; however, it is unambiguous that the major risks to the project are financial and adequate project monitoring. Regarding financial risks, proponents need to focus on a context-appropriate financial structure that builds on and draws lessons from its cancelled predecessor project. Considering this project represents a bigger undertaking than the cancelled project, it is imperative to have concrete commitments and agreements with the private investor and the market to protect the project from priority changes during the project. Since the proponents mention that Dominica Geothermal Development Company (DGDC) has limited monitoring capacity, exploring other innovative monitoring tools may be necessary to ensure that problems are identified quickly and corrective measures are always timely. Proponents should also work to ensure that impacts on biodiversity are kept at a minimum during the construction phase and that appropriate mitigation measures are taken.

The proponents may need to reflect on potential future scenarios. These reflections could include the appropriateness of proposed financial mechanisms if interest rates change, the competitiveness of geothermal energy compared to other energy sources when fuel prices fluctuate and technological changes.

Overall, this is a good project. Its success will depend on how much the proponents can learn from and build on lessons from the cancelled Dominica Geothermal Risk Mitigation I Project.

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
- ☐ 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 (400 words)

The proponents describe the problem of over-reliance on fossil fuel imports to drive Dominica's energy sector. The vulnerability of the Island to climate change shocks and the cascading impacts on the economy are adequately described, and the proponents make a strong case for resilient and renewable energy systems. This is made even more urgent following the devastating impacts that Hurricane Maria had on Dominica's electricity sector. However, considering the cancellation of the Dominica Geothermal Risk Mitigation I Project, it will be important

for proponents to institute appropriate measures to improve the likelihood of success within the country context. Therefore, besides focusing on financial innovations, it is important that project proponents consider all factors (i.e., economic, socio-cultural, political, etc.) that influence investor confidence and market responsiveness to renewable energy sources.

Discussions on potential future scenarios need to be strengthened by including reflections on economic, political, and technological factors that could affect the competitiveness of geothermal energy. Moreover, besides the energy storage advantage mentioned in the proposal, it may benefit proponents to further reflect on the selection of geothermal energy over other renewable energy sources such as wind and solar.

Proponents need to reflect on required changes in institutional arrangements and stakeholder behaviour, learning from the previous initiatives within the country context. Specifically, to increase the likelihood of success, the proponents need to consider activities that enable them to understand stakeholder values, interests and norms better – in other words to scale deep (See [the STAP document on scaling](#)).

By supporting the transition from fossil fuel to renewable energy sources, the proposed project has vast potential to generate GEBs, which have been challenging due to financial barriers. Since there may be challenges to investor confidence in Dominica's economy in general and the energy sector in particular, necessary and sufficient guardrails must be implemented to increase the likelihood of success. For example, while the energy policy supports geothermal energy, the proponents may benefit from reflecting on and exploring broader and transformational economic incentives for investing in renewable energy.

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 that the proponent address the points raised in Section 2 above, as well as the specific points below:

1. To improve the risk table, proponents should focus on mitigating the remaining risks that the design instruments fail to address adequately. In other words, the risk table should reflect what the proponents will do if there is a lack of change despite proposed actions. Please see [STAP's information note on clarifying risks in GEF projects](#) for more details and guidance on documenting risks in project design.
2. Develop a simple narrative of plausible futures that considers the different drivers and how competitive geothermal energy will be under different scenarios. The interventions should be design such that they are robust to the different plausible futures. See STAP [papers on simple future narrative](#) on how to do this.
3. Understanding institutional arrangements and stakeholder behaviours is a priority. Insights gained should enable the design of appropriate measures to increase the likelihood of project success (see STAP guidance on [leveraging innovation for transformation](#)).
4. Learning from the cancelled Dominica Geothermal Risk Mitigation I Project, it is important to secure firm private sector commitments on both the demand and supply side.

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.)