

Terms of Reference for Potential Study Agreement

This document serves to provide an overview of the underlying project pursued by the Subnational Climate Fund (SCF), relevant context on data availability and goals of the mandate, as well as an estimated scope of work requested from the consultant. Final details of the mandate should be covered by the subsequent proposal submitted by the consultant.

1. The Subnational Climate Fund

The SCF is a blended finance impact fund formed to pursue attractive risk-adjusted returns for private investors while generating measurable and certified environmental and social impacts. The Fund is focused exclusively on pursuing investments in mid-size climate infrastructure and nature-based solutions in various developing countries across Latin America and the Caribbean, Africa, the Mediterranean, and Asia. The Fund is managed by Pegasus Capital Advisors, a commercial Private Equity impact fund manager and further benefits from a separate, grant-funded Technical Assistance facility managed by The International Union for the Conservation of Nature (IUCN) and implemented by R20, IUCN, and Gold Standard.

2. Context of the Potential Study Agreement

The SCF is in conversations with a potential opportunity in Ecuador about building waste management facilities. The potential target company intends to build and operate an integrated waste management facility including sorting with RDF production, composting and recyclable plastic flakes production in a city of the Manabi province in Ecuador. The intention is to replicate the model in other cities in Ecuador and the region, seeking investment and TA funding from the SCF. Ecuador presents a conducive environment for a multitude of waste management plants, with a large potential of mitigating methane emission from the landfills and dumpsites. Thus, the SCF now seeks to assess the feasibility of the first project in Ecuador.

100% of the Municipal Solid Waste (MSW) of the target city will be the type of feedstock to be treated. Currently the collected MSW amount is estimated at 100k -111k tons per year, based on the exiting waste quantity and quality study conducted by the city in 2018. Two technology providers of the sorting plant have been assessed and quotes obtained. The site for the plant is already in place and environmental permit obtained, which is a site identified and planned by the city to be the site of a new landfill, as the existing landfill is close to being full. The existing landfill is about 14km away from the designated site for the new landfill and the planned waste management facility. Outputs will include RDF, recyclable materials sorted out from the sorting plant, compost, and recyclable plastic flakes. The off-taker of the RDF would be a cement plant nearby which has provided quality specification of RDF. The compost would be deposited in the landfill as cover for free or sold at a low price for remediation. Recyclables would be sold at spot prices to the market. There are abundant studies available already, including but not limited to:

- Waste quantity and quality study
- Environmental studies of the designated site
- Full business model
- RDF off-taker's quality specification
- Mass balance of the sorting plant
- Information about informal waste pickers and their associations

3. Scope of Work for a Feasibility Study

The consultant is expected to provide the following assessment:

- I. Full technical and economic feasibility assessment of the entire project, specifically:
 - Technical feasibility of producing outputs from the sorting plant that can meet the quality and quantity requirement of off-takers, buyers and end-users. This involves the assessment of the MSW amount as feedstock, its composition), if necessary, carrying out a waste characterization study. Assessment of plant design as a whole and each component (i.e. sorting, composting, plastic flake production), if improvement is needed provide the improved design in collaboration with technology existing partners.
 - Economic feasibility of the business model, including sensibility analysis and contingency plan (in case of variation of input amount and composition, and other risks that need to be considered), validation of civil works and its cost (if needed, provide cost refinement)
- II. Development of a concept and plan on how the informal waste pickers could be integrated into the project to ensure social acceptability of the project and sufficient feedstock
- III. Assess the feasibility of meeting national regulatory requirements as well as EU regulation for emission levels from the combustion of RDF combustion in cement plant
- IV. Assess the technical and economic feasibility of using renewable energy for the power supply
- V. Assess the technical and economic feasibility of a Nature-based solution component

4. Deliverables

The consultant is expected to provide the findings in the format of a Word document, including graphics that may help illustrate processes and procedures.

5. Timeline

Work is expected to commence immediately after the consultant is appointed. The work is expected to be completed within two months after signing the service contract.

6. Form of Proposal

Please prepare a brief proposal for the performance of this work, including the proposed fee structure, including hourly rates and calculation thereof for completing the work required, and your/your firm's experience in the mentioned sector. The budget for this study is capped at 80,000 USD. Travel cost for field visit will be covered by the SCF separately from the consultancy fee.

7. Submission

Please submit your proposal by August 24, 2022 by sending it to project@regions20.org