SUBNATIONAL CLIMATE FUND

Request for Proposals

Feasibility Study: Technical and Market Validation for an olive mill wastewater valorisation project in Tunisia

Project Sponsor: Regenerative SARL, Tunisia

Version 2 November 2026

This document serves to provide an overview of the underlying project relevant to the Subnational Climate Fund (SCF), 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 with 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 Catalytic, IUCN, and Gold Standard.

2. Context of the Potential Study Agreement

The Subnational Climate Fund (SCF) seeks a consultant to validate the technology, market and agronomic performance of the Regenerative SARL project in Tunisia. The study is funded as SCF technical assistance (TA).

Regenerative SARL plans a facility in an industrial estate in the Nabeul governorate. It will turn olive mill wastewater (OMW, "margine") and livestock manure into three products: biochar, compost blended with biochar ("Regen Solid") and spirulina-based biostimulants ("Regen Liquid"). Farmers are the target customers.

An SCF-funded pre-feasibility study found:

- Biochar can be made from sedimented OMW: pilot runs at approximately 550°C gave a yield of approximately 30%, but total output so far is approximately 50 kg plus one 100 kg batch at CRTEn
- The biochar is alkaline and salty (pH 10, EC 4.4 mS/cm, ash 46%) and suits use as a soil amendment, not an adsorbent
- The H/Corg ratio used in the LCA is 0.70, at the limit allowed by carbon removal standards; the report also quotes 0.04 and 0.44
- The feedstock arrives in wet, compact blocks; the assumed Pyronexus unit needs an extra shredder and dryer, and no other technology has been compared
- No offtake agreements, Letters of Intent or field trial data exist; a pilot group of 10 vegetable growers and a research partnership with INAT are in place

- Carbon credits are unlikely under the current structure because the project is viable without them; an SPV or carbon insetting could change this

The financial model rests on the assumptions below.

Assumption	Current value	Source
Pyrolysis unit CAPEX	USD 800,000 to 850,000, plus shredder and dryer (not costed separately)	Pre-feasibility, model
Throughput and output	6 t/day wet feedstock, 313 days/yr; approx. 580 t biochar/yr	Pre-feasibility
Feedstock supply	2,000 t/yr plus a 20,000 t reserve in evaporation ponds	Pre-feasibility
Regen Solid price	USD 100/t (project brief: EUR 50/t)	Model, brief
Regen Liquid price	USD 3,000/m³	Model
Revenue 2027	USD 1,588,200, all from Regen products	Model
Capital	USD 2,200,000 (2026) and USD 3,300,000 (2028); 9-year IRR 13.6%	Model

The prices, volumes and CAPEX are unvalidated. The findings will inform the full feasibility study and the investment case.

2.1 Objective and key questions

The study will test whether Regenerative SARL can build a plant that works, sell its products at the prices in its model, and show farmers a real benefit.

The study must answer five questions:

1. Which pyrolysis technology can process sedimented OMW at the planned throughput and produce biochar that meets carbon removal standards (H/Corg below 0.7, with margin)?
2. How much shredding and drying does the feedstock need, and what are the all-in CAPEX and OPEX of the recommended set-up?
3. Which farmers and buyers will purchase Regen products, at what price and in what volumes, and do these support the model's revenue assumptions?
4. Will qualified buyers commit to purchases, through Letters of Intent or pilot agreements?
5. Does Regen Solid improve soil health, yield and farmer returns on tomato compared with current farmer practice?

3. Scope of Work

The study covers four workstreams. It focuses on the Nabeul governorate and the main vegetable and olive growing areas that could be supplied from the plant.

Workstream 1: Pyrolysis technology benchmark

1. Review all feedstock data: moisture, ash, particle size, calorific value, contaminants and variation between ponds and seasons. Reconcile the three H/C values in the pre-feasibility report and say which one the lab certificates support.
2. Specify any additional feedstock tests needed and the number of samples required.
3. Assess shredding and drying options (solar, pyrolysis gas or waste heat, later biogas heat), with their energy use, footprint and cost.

4. Compare 6 to 10 commercially available technologies, including Pyronexus and ARTI, against criteria agreed with SCF and Regen before scoring. Separate proven commercial performance from vendor claims.
5. Shortlist three technologies and obtain indicative quotations.
6. For each shortlisted technology, set out the mass and energy balance and the H/Corg it can achieve at the planned operating conditions.
7. Recommend a technology and configuration, and give all-in CAPEX and OPEX with an accuracy range.

Workstream 2: Market and demand validation

1. Define the target customer segments by crop, farm size, irrigation, region, soil and current input spend.
2. Estimate TAM, SAM and SOM for each product.
3. Compare competing inputs (synthetic fertilisers, commercial composts, imported biostimulants) on price, application rate and cost per hectare.
4. Ask farmers and distributors about current input use, interest in Regen products, acceptable application rates and willingness to pay.
5. Test the model prices (USD 100/t Regen Solid, USD 3,000/m³ Regen Liquid) and the EUR 50/t in the project brief, and say which, if any, hold.
6. Assess routes to market (direct sales, cooperatives, input distributors such as HMT and SOCOPEC, agribusinesses) and recommend one per priority segment.
7. Screen 5 to 10 agri-food or input companies with Scope 3 targets for interest in buying Regen products with documented carbon removal.
8. Build a list of qualified buyers and support Regen in securing Letters of Intent or pilot agreements. Regen leads negotiations; LOIs are not a guaranteed deliverable.

Workstream 3: Agronomic trials

1. Design a trial of Regen Solid on tomato with INAT (Institut National Agronomique de Tunisie), with treatments for current farmer practice, compost only, biochar only, Regen Solid at two rates, and Regen Solid with reduced synthetic fertiliser.
2. Run the trial on station at INAT Mornag (or an equivalent station) and at 2 to 4 commercial farms, with sites chosen to match the priority segments.
3. Test each product batch before use (pH, EC, nutrients, heavy metals against NT 10.44). Set application rates that avoid salinity or alkalinity damage to tomato.
4. Measure soil health (organic carbon, nutrients, pH, EC, water retention), yield, fruit quality, fertiliser and water use, and costs.
5. Calculate the net return per hectare for each treatment, and compare it with the willingness to pay found in Workstream 2.
6. Include Regen Liquid only if a consistent, characterised formulation exists at the start.

Workstream 4: Investment case update

1. Combine the findings of Workstreams 1 to 3.
2. Update the CAPEX, OPEX, volume, price and ramp-up inputs in Regen's financial model, with a change log showing old value, new value and source.
3. Run low, base and high cases, and say which factor limits the investment case first: technology, price, demand or agronomic benefit.
4. Recommend whether to proceed to full feasibility: proceed, proceed with conditions, or do not proceed, with the conditions and the open issues for the certification audit and SPV work.

Methodology and data sources

Workstreams 1 and 2 are mainly desk-based, with supplier contact and a limited number of interviews. Workstream 3 is a field trial. Bidders should propose their own approach within the budget. Minimum requirements are below.

Desk review. Bidders should draw on, at a minimum:

- Regen documentation provided by SCF: project brief, pre-feasibility report and annexes (lab analyses, CRTEn pilot, pre-LCA, financial model)
- Technology supplier specifications, reference plant data and quotations
- Tunisian sources: Ministry of Agriculture and ONAGRI statistics, fertiliser import and price data, organic farming statistics, APIA
- Standards: Tunisian standard NT 10.44, WBC/EBC guidelines, Puro.earth biochar methodology (2025)
- Published research on biochar and compost performance in Mediterranean or arid soils

Primary data (market validation). Enough interviews to test Regen's assumptions. A representative survey is not required.

- Structured interviews with approximately 40 farmers across the priority segments
- Approximately 10 interviews with distributors, cooperatives and agribusinesses
- Approximately 5 to 10 interviews with potential insetting buyers
- Willingness to pay should be tested with a price-sensitivity method, not a single direct question

Field trial. The INAT trial should use a randomised block design with at least four replicates. On-farm sites may use a simpler paired-plot design. The protocol is approved before any product is applied and is not changed afterwards without SCF's agreement. Data is recorded by INAT or another party independent of Regen.

Analysis. Technology scoring, market estimates and trial results should state all assumptions, data gaps and confidence levels. Market volumes and prices should be presented as ranges. Trial results should report effect sizes and statistical significance, and should not be extrapolated beyond the crop, soils and season tested.

4. Deliverables and Timeline

Work is expected to commence immediately after the consultant is appointed. The assignment runs for 26 weeks from contract signature, subject to the tomato cropping calendar. The technology benchmark is delivered first, because it sets the CAPEX that the rest of the investment case depends on. The trial starts at inception, so it does not miss the season. The reporting timeframes are anticipated to be as follows:

Deliverable	Content	Due (week)
Inception report (max. 10 pages)	Refined methodology, feedstock testing plan, technology scoring criteria, interview guides, trial protocol and sites, work plan, risks to delivery	2
Technology benchmark report	Workstream 1 findings: feedstock design basis, drying options, technology comparison, recommended set-up, CAPEX and OPEX	6

Market validation report	Workstream 2 findings: segments, TAM/SAM/SOM, price test, willingness to pay, routes to market, insetting screen, buyer list and any LOIs	16
Trial establishment note	Sites, baseline soil data, product batch analyses, deviations from protocol	8
Draft final report	All four workstreams, with trial results, updated model inputs, low/base/high cases and recommendation	24
Final report and presentation	Report revised to address SCF comments (max. 40 pages plus annexes, with a 3-page executive summary); presentation to SCF and, if requested, the TAPS Committee	26

Annexes to the final report must include the updated model inputs and change log (in Excel), the technology scoring matrix, anonymised interview data, the full trial dataset, a list of sources and a list of persons consulted.

Report format: Executive Summary; table of acronyms; bibliography; prepared in Word format, following the SCF's standard template for Technical Assistance studies.

5. Evaluation

Please see Annex I.

6. Form of Proposal & Requirements

Please prepare a brief proposal for the performance of this work, including the scope of work, project team and qualifications, and estimated costs.

1) **Scope of Work:** The scope of work should include a description of the specific activities that will be performed in order to accomplish the required tasks identified in Section 3. This should include any proposed site visits/reconnaissance, documents to be reviewed, interviews, etc.
2) **Project team and qualifications (see Annex I for more details):**
   This should include the name of the principal staff members and any sub-contractors, and a brief description of their role within the project team. Qualifications of staff should include relevant technical capabilities, full CVs, specific previous experience similar to this assignment, specific in-country experience and knowledge.
3) **Estimated costs (see Annex I for more details):**
   Provide a lump-sum consultancy fee (not to be exceeded) including all applicable taxes and a separate travel expense estimate. Travel is reimbursed at actual cost against receipts, up to the estimate.
4) **Contract & payments:**
   The contract will be based on Catalytic's standard terms of engagement, fixing a total consultancy fee on lump-sum basis in US Dollars. Catalytic will pay the consultant in 2-3 instalments: E.g. one advance payment of 20% upon signature of the contract, one payment of 40% after delivery of the draft report, final payment of 40% after delivery of the final report.
5) **Conflicts of interest & KYC documentation:**
   As part of the proposal, the Consultant shall also confirm that they do not have a conflict of interest and that they are in a position to provide an adequate, accurate and objective review. In addition, we will request an extract from the commercial registry and passport copy for a KYC / DD check for shortlisted candidates.

7. Management and reporting

- Regen will provide access to its data, staff, feedstock, product samples and pilot growers, and may comment on draft findings. The consultant's conclusions are independent; Regen has no approval right over deliverables.
- Kick-off call in week 1 and progress calls with SCF every two weeks.
- All data, models and reports are the property of SCF and may be shared with SCF, its investors and Regen.
- Supplier quotations and commercially sensitive Regen information are confidential.
- Field work must follow informed consent practices; farmer data must be anonymised.

8. Submission

Please submit your proposal before **17:00 CET** on **Monday, 23 November 2026** by sending it to project@catalyticfinance.org

Annex I: SCF RFP – Evaluation Criteria

Each proposal is scored from 0 to 5 on nine technical criteria and on price. Each criterion carries a weight in percent, and the weighted scores add up to a total out of 5. The eligible proposal with the highest total wins. The evaluation runs in three steps:

1. **Compliance check.** Proposals that fail any pass/fail requirement are not scored.
2. **Scoring.** Evaluators score each technical criterion from 0 to 5, and the price score is calculated by formula. Both are entered in the same scoring sheet, and each score is multiplied by its weight.
3. **Eligibility and total.** A proposal can be selected only if its technical subtotal is at least 3.0 and no technical criterion is scored below 2. Among eligible proposals, the highest total wins.

$$\text{Weighted score} = \text{Score (0–5)} \times \text{Weight (\%)}$$

Stage 1: Compliance (pass/fail)

Proposals that fail any of the requirements below are not scored further.

Requirement	Evidence required
Complete submission	Technical proposal, financial proposal in the required template
Key personnel meet minimum requirements	CVs for the team lead, process engineer, agricultural market specialist and agronomist / soil scientist, each meeting the minimums in the next section.
Language capacity	At least one key team member able to work in French and ideally another one in Arabic; all deliverables in English
Declaration of independence	Signed declaration of any past or current relationship with Regenerative SARL or with pyrolysis technology suppliers. A disclosed relationship does not disqualify a bidder, but the proposal must explain how it will be managed
Budget ceiling	Total consultancy fees, all applicable taxes included, do not exceed USD 110,000. Travel related expenses are separate from this. A travel expense estimate should be included in the proposal.

Stage 2: Technical evaluation (85 %)

The technical evaluation has nine criteria in three groups: technical approach (35 %), key personnel (30 %), and institutional capacity and delivery (20 %).

#	Criterion	Weight	What evaluators look for
A	**Technical approach**	**35%**	
T1	Workstream 1: Pyrolysis technology benchmark	15**%**	The proposal explains: (a) how many feedstock samples will be taken, from which ponds and seasons, and which parameters will be tested; (b) how the bidder will determine which of the three H/Corg values in the pre-feasibility report is supported by laboratory results; (c) which shredding and drying options will be assessed for wet, compact feedstock, and how their energy use and cost will be estimated; (d) how vendor claims will be verified, for example through data from operating

#	Criterion	Weight	What evaluators look for
			reference plants or contact with their operators; and (e) the expected accuracy of the CAPEX and OPEX estimates (e.g., ±30%) and what that accuracy is based on.
T2	Workstream 2: Market and demand validation	10%	The proposal explains: (a) how target customer segments will be defined, and how the farmer, distributor and insetting buyer interviews will be spread across them; (b) which price-sensitivity method will be used to test willingness to pay, and how it will test the prices in the model and project brief; (c) how TAM, SAM and SOM will be estimated, and from which data sources; (d) how companies with Scope 3 targets will be identified and approached; and (e) how the bidder will support Regen in securing Letters of Intent or pilot agreements.
T3	Workstream 3: Agronomic trials	10%	The proposal explains: (a) the trial design at INAT Mornag or an equivalent station (treatments, randomised blocks, at least four replicates) and on farms (paired plots), and how farm sites will be chosen; (b) how each product batch will be tested before use, including heavy metals against NT 10.44; (c) how application rates will be set to avoid salinity or alkalinity damage to tomato; (d) how data will be recorded independently of Regen and analysed statistically; and (e) how the trial will be established in time for the tomato season.
B	**Key personnel**	**30%**	
T4	Process engineer	9%	The CV shows: (a) direct experience designing or operating pyrolysis or biochar plants; (b) experience with wet or high-ash feedstocks; and (c) enough time allocated to Workstream 1, in person-days, to deliver the technology benchmark by week 6.
T5	Team lead	8%	The CV shows: (a) experience leading agricultural or waste-to-value feasibility studies; (b) experience of investment-oriented or DFI-funded assessments; and (c) enough time allocated across the 26 weeks to coordinate all four workstreams and lead the investment case update.
T6	Agricultural market specialist	7%	The CV shows: (a) experience of farm input market studies in Tunisia or North Africa; and (b) experience designing and conducting interviews with farmers and distributors in French or Arabic.
T7	Agronomist / soil scientist	6%	The CV shows: (a) experience designing and statistically analysing field trials; and (b) preferably, trials of biochar, compost or other soil amendments in arid or Mediterranean conditions.
C	**Institutional capacity and delivery**	**20%**	
T8	Bidder experience and research partnership	10%	The proposal shows: (a) comparable assignments completed by the bidder or consortium members, with client references; and (b) a partnership with INAT or another Tunisian research institute for the field trial. A signed letter of commitment stating the institute's role is preferred. Bidders without one should provide evidence of contact and a plan to formalize the partnership. A

#	Criterion	Weight	What evaluators look for
			signed agreement will likely be required before contract signature.
T9	Work plan, integration and risk management	10%	The proposal shows: (a) a schedule that meets the inception (week 2), technology benchmark (week 6) and trial establishment (week 8) milestones and fits the tomato cropping calendar; (b) person-days per expert for each deliverable; (c) how findings from Workstreams 1 to 3 will feed the updated financial model and recommendation; (d) quality assurance arrangements; and (e) the main risks to delivery (e.g., a missed season, no LOIs, feedstock variability) with mitigation measures.
	Technical total	**85%**	

Scoring scale

Each technical criterion is scored on 0 to 5 scale. Half points are not used. The guidance columns describe what each level looks like for this assignment, so that evaluators apply the labels consistently.

Score	Label	Guidance: technical approach (T1–T3, T9)	Guidance: personnel and experience (T4–T8)
5	Exceeds expectations	Fully meets the ToR, shows clear insight into the project's specific risks, and adds value beyond it	Outstanding, directly comparable experience on several assignments; recognised expertise
4	Strongly meets expectations	Specific, well-justified proposals tailored to this project	Strong, directly comparable experience, including in the region or with similar feedstocks or crops
3	Meets expectations	Sound approach that largely restates the ToR	Relevant, comparable experience
2	Minimally meets expectations	Partially meets the ToR; significant weaknesses	Meets the minimum requirements with limited depth
1	Does not meet expectations	Generic or superficial; major gaps or misunderstanding of the ToR	Experience only loosely related to the role
0	Not addressed	No relevant content	No relevant information

Example: what different scores look like on T1. The table below shows how the scale applies to one criterion, the technology benchmark. It gives evaluators a shared reference point, so that a 3 or a 5 means the same thing to each of them.

Score	What a T1 proposal at this level looks like
5 – Exceeds expectations	Covers all five items (a to e) specifically for this project. For example, it states how many feedstock samples will be taken from which ponds, explains how the three H/Corg values will be checked against laboratory results, and proposes to verify vendor claims using data from operating plants that process similar wet feedstock.
3 – Meets expectations	Covers most items but largely repeats the ToR. For example, it commits to comparing 6 to 10 technologies but does not say how vendor claims will be checked, or mentions the H/Corg issue without explaining how it will be resolved.
1 – Does not meet expectations	A generic approach to technology selection, with no reference to this feedstock, the H/Corg question or how costs will be estimated.

Worked example. A score of 4 on T1 (weight 15%) gives a weighted score of 4 × 15% = 0.60. The same score of 4 on T7 (weight 6%) gives 0.24

Stage 3: Financial evaluation (15%)

The financial score is based on the consultancy fees only (excluding travel expenses). The lowest total price among proposals that meet the technical minimum scores 5; other proposals score in proportion:

$$\text{Price score (0–5)} = 5 \times \frac{\text{Lowest eligible total price}}{\text{Bid total price}}$$

The financial proposal should show two parts separately, both of which count towards the total price:

- **Consultancy fees:** daily rate and person-days for each expert, per workstream, plus laboratory analyses (feedstock, biochar, product batches, soil) and trial costs, shown separately for the INAT Mornag (or equivalent) station trial and the on-farm sites. Fees for interpreters and enumerators, per diems should be included here, as well as sample shipping fees (if applicable).
- **Travel and other expenses:** travel and field costs for interviews and site visits, and any other costs, itemised. These will be reimbursed at cost basis. Such as:
    - International and domestic travel (flights, train or bus)
    - Local transport for fieldwork (vehicle hire, fuel, driver) to farms, olive mills, evaporation ponds and INAT Mornag or equivalent station
    - Accommodation during field trips
    - Visits to reference pyrolysis plants, if proposed, including any travel abroad

Total score, technical minimum and clarifications

The total score is the technical subtotal (maximum 4.25) plus the weighted price score (maximum 0.75), for a maximum of 5. Technical criteria and price are scored together in the same sheet.

Minimum technical score. A proposal can be selected only if its technical subtotal is at least 3.0 and it scores at least 2 (minimally meets expectations) on every technical criterion. A proposal below this minimum cannot win, whatever its price.

Example with three bids.

	Bid A	Bid B	Bid C
Technical subtotal (max. 4.25)	3.16	3.50	2.60
Meets technical minimum?	Yes	Yes	No
Total price (USD)	110,000	115,000	90,000
Price score (0–5)	5.00	4.78	Not eligible
Weighted price score (× 15%)	0.75	0.72	–
Total (max. 5)	3.91	4.22	Not eligible

Bid B wins: its stronger technical proposal outweighs its slightly higher price. Bid C has the lowest price but is below the technical minimum, so it cannot be selected and its price does not set the benchmark for the others.