

Request for Proposals (RFP)

Development of an Analytical and Impact Framework for Greenhouse Gas (GHG) Emissions and Decarbonisation Pathways in Maritime Ports

1. Purpose

The Catalytic Finance Foundation (Catalytic') is a blended finance incubator, technical assistance provider and catalytic investor dedicated to accelerating the design and deployment of innovative finance solutions for sustainable infrastructure. Its track record includes supporting the creation of funds such as the [Subnational Climate Fund](#) (USD 750M), [GAIA Climate Loan Fund](#) (USD 1.5BN), and the [Global Fund for Coral Reefs](#) (USD 500M).

Under the Catalytic Cities program, funded by Bloomberg Philanthropies, Catalytic is advancing the development of a blended finance vehicle to support port efficiency and profitability through decarbonization activities by offering financing and grant-based technical assistance to eligible projects.

The investment vehicle will focus on core impact goals on climate change, health and gender equality (SDGs 13,3,5), as well as co-benefits for SDG 7, 9, 14, and 17. Moreover, the Fund will implement impact safeguarding and monitoring, reporting and verification frameworks in line with the best practice of the impact investing industry. Capacity-building initiatives will also be implemented for greater impact.

The indicative target impacts for SDG 13: Climate Action is the reduction of GHG emissions from port operations. For SDG 3: Good Health and Well-Being, the reduction of death & illness associated with air pollution in cities through reduced diesel use and improved air quality (PM, NOx). A study on the Ports of Seattle and New York/New Jersey finds that PM2.5 emissions could be reduced by 69-75% under a full electrification scenario. Associated monetized health benefits from improved air quality were estimated to be \$27-150 million annually. For SDG 5: Gender Equality a Gender Action Plan with specific outputs tackling issues regarding women's workforce participation (particularly in leadership positions), safety, and infrastructure. This can include quotas for women's participation, targeted training, and the improvement of port infrastructure (e.g. CCTV, separate toilets, night lighting).

The purpose of this RFP is to commission the development of a comprehensive *yet adaptable* analytical and impact framework for measuring, benchmarking, and interpreting GHG and pollutant emissions from maritime ports. Recognizing that ports *vary widely* in their operational structures — from landlord models leasing terminals to third-party operators, to fully integrated industrial or logistics hubs — the framework should be designed to differentiate and account for distinct emission sources and responsibilities across port typologies and operational boundaries.

2. Background

Maritime ports are critical nodes in global trade but also major sources of greenhouse gas (GHG) emissions and local air pollution. Despite their importance, there is currently no internationally recognised methodology for measuring, benchmarking, and interpreting emissions and related impacts specific to ports.

While frameworks such as the Science Based Targets initiative (SBTi), Climate Bonds Initiative (CBI), and the EU Taxonomy provide guidance for shipping and general infrastructure, they do not comprehensively address port-specific emissions, local pollution, or socioeconomic implications. This gap has led to fragmented accounting, underreporting of Scope 3 emissions, and limited access to climate-aligned finance.

At the same time, ports are often located in urban or economically vulnerable communities where air pollution, employment shifts, and infrastructure investment decisions have tangible impacts on livelihoods and health. Addressing port emissions therefore offers an opportunity not only to reduce GHGs but to generate measurable co-benefits—improved air quality, local job creation, workforce reskilling, and enhanced community resilience.

3. Objective

The objective of this assignment is to develop a robust analytical and impact framework and benchmarking tool that enables consistent measurement, benchmarking, and interpretation of GHG and pollutant emissions from maritime ports, and links these to the broader environmental, social, and economic impacts of port decarbonisation.

Specifically, the framework should:

- Establish a harmonised and technically rigorous emissions methodology for ports;
- Demonstrate how key decarbonisation measures (e.g., electrification, renewable energy use, fuel switching, logistics optimisation) translate into environmental, social, and economic outcomes;
- Provide actionable insights for port authorities, investors, and development finance institutions (DFIs) to mobilise climate-aligned and inclusive investment in port infrastructure.

4. Scope of Work

(to be finalised in consultation with the selected consultant during contracting phase)

The consultant will undertake the following indicative tasks:

4.1 Assessment of Existing Practices

- Review current port GHG and pollutant measurement and reporting practices globally.
- Map existing tools, standards, and data sources relevant to ports.
- Identify gaps, inconsistencies, and opportunities for harmonisation and improvement.
- Analyse how emissions and impact data are currently used to inform investment and policy decisions.

4.2 Development of a Harmonised and Adaptable Framework

- Define a typology (e.g., landlord, operational, industrial, mixed-use).
- Propose a modular methodology with consistent core metrics but flexible modules per port type. (A modular framework is one that's built from standardized components (that can be applied or combined depending on a port's characteristics — rather than forcing all ports into a single uniform model).

- Pilot-test the framework on a few contrasting ports (e.g., one landlord, one integrated, one industrial) to stress-test usability.
- Develop a technically sound methodology for measuring, benchmarking, and interpreting port emissions (Scopes 1, 2, and 3).
- Integrate indicators for local air pollution (PM, NO_x, SO_x) and assess community-level exposure impacts.
- Map the framework's alignment with leading global standards (SBTi, GHG Protocol, EU Taxonomy, CBI).
- Design the framework to support **scenario-based analysis** of different decarbonisation measures.
- Identify key decarbonisation interventions (e.g., equipment electrification, shore power, alternative fuels, modal shifts) and illustrate how they can be captured within emissions and impact metrics.
- Develop guidance on data requirements, collection protocols, and verification methods.

4.3 Pilot Testing and Validation

- Pilot the draft framework with **2–3 representative ports** (to be identified jointly with Catalytic Finance Foundation) to assess feasibility, usability, and data availability.
- Collect feedback from port authorities, investors, and policymakers to refine the final framework and benchmarking tool.

4.4 Global Case Studies

- Develop **10–12 concise global case studies** representing diverse geographies, cargo types, and governance models.
- Highlight specific **decarbonisation initiatives**, their emission-reduction results, and observed or potential social and economic impacts (e.g., job creation, health benefits).
- Document best practices and replicable solutions for ports in both developed and emerging markets.
- Define and propose a concise set of **impact indicators** linking emissions and pollution reduction to outcomes such as public health, employment, gender, skills development, and community well-being.
- Evaluate distributional effects of port decarbonisation on surrounding communities, with emphasis on vulnerable populations.
- Recommend pathways to ensure that port transformation supports **just transition**, **inclusive growth**, and **environmental equity**.
- Align proposed indicators with ESG and SDG reporting frameworks.

5. Deliverables

1. Inception Report and Work Plan (within 1-2 weeks of project start).
2. Assessment Report on existing emissions measurement and impact practices.
3. Draft Analytical and Impact Framework and Benchmarking Tool (including decarbonisation–impact linkages).
4. 10–12 Global Case Studies.
5. Impact Pathways Overview – mapping decarbonisation measures, associated emission reductions, and expected social/economic outcomes.

6. Final Framework, Tool, and Guidance Manual.
7. Final Synthesis Report and Dissemination Presentation.

6. Data Access

The consultant will primarily rely on publicly available or secondary data. Where feasible, the contracting entity will facilitate engagement with selected ports and relevant stakeholders to enable pilot testing and data validation.

7. Timeline and Budget

- **Total Duration:** 2-4 months.
- **Expected Start Date:** beginning of December 2025.

Consultants must propose a feasible plan for delivery within this timeframe.

8. Consultant Qualifications

Applicants should demonstrate expertise in:

- GHG accounting, emissions benchmarking, and climate framework development;
- Maritime transport and port operations;
- Decarbonisation strategy design and impact assessment;
- Socioeconomic analysis and just transition approaches;
- Experience with DFIs, multilateral organisations, or infrastructure investors.

Consortia combining technical, environmental, and socioeconomic expertise are encouraged.

9. Proposal Submission Requirements

Proposals must be concise and structured as follows:

A. Technical Proposal (max. 10 pages, excluding appendices)

1. Understanding of the assignment and its policy/investment relevance.
2. Proposed methodology, including approach to integrating emissions, decarbonisation pathways, and impact metrics.
3. Work plan and implementation timeline (aligned with the 2-4-month duration).
4. Team composition and relevant experience (CVs in appendix).
5. Examples of similar assignments.
6. Risk management and mitigation plan.

B. Financial Proposal

- Total cost in USD (inclusive of all applicable taxes and expenses).
- Cost breakdown by task and expert.

10. Evaluation Criteria

Evaluation Criterion	Weight
Technical approach and understanding of assignment, including integration of environmental, social, and decarbonisation impacts	35%
Relevant experience and qualifications of the team	25%
Feasibility and quality of work plan and methodology	25%
Cost-effectiveness and value for money	15%

11. Submission Details

All proposals must be submitted electronically to: secretariat@catalyticfinance.org and

Vangelis Papakonstantinou / Catalytic Finance Foundation /
vangelis.papakonstantinou@catalyticfinance.org by **Wednesday 26th November 2025**

Please include “**RFP – Port Emissions and Impact Framework**” in the subject line.

12. Clarifications

Requests for clarification should be submitted in writing to secretariat@catalyticfinance.org and vangelis.papakonstantinou@catalyticfinance.org no later than 21st November.

Responses to questions will be shared with all interested bidders.

13. Contracting Note

The final **scope of work and deliverables** will be confirmed and refined during the contracting phase, in close consultation with the selected consultant, to ensure alignment with available resources, data access, and stakeholder engagement needs.

