



## **Request for Proposals Port of Argentinia Port Electrification Study**

August 4, 2023

### **Background**

Port of Argentinia (POA) plays a critical role in the national and regional economies. Geotechnical Studies are currently ongoing to support a proposed new dock expansion at Cooper Cove, doubling capacity at Argentinia marine terminal. Infrastructure enhancements such as in-ground utilities and port electrification initiatives will advance Argentinia's green port agenda and support Canada's net zero targets for emission reduction. This multi-purpose dock facility will see investments in key asset acquisitions such as a mobile harbour crane, forklifts, and ancillary warehouses, and will provide quayside supports to several key industry sectors including offshore and renewable energy, mining, heavy transport vessels and green fuels export.

In concert with the proposed development at Cooper Cove, POA seeks to enhance its service delivery through green upgrades to its existing infrastructure, reducing emissions and becoming environmentally sustainable.

In preparing this Request for Proposals, POA consulted with Renaissance Energy to craft the terms of reference for the required scope of work.

### **Study Objectives**

The primary objectives of this study are to develop strategies POA can follow to cost-effectively reduce its emissions (primarily through electrification) and enable emission reductions of key stakeholders that make use of POA's facilities.

The study deliverables are to be used by POA to inform and plan for capital and operational expenditures and conceptual engineering design to enhance current operations and planned developments at Cooper Cove as an environmentally sustainable port.

### **Mission Statement**

***"Port of Argentinia provides effective stewardship of the seaport and industrial property assets at Argentinia for the long-term benefit of the communities and people of the Placentia region of Newfoundland & Labrador."***

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Aligned with its Mission Statement, POA intends to maximize NL content in this study to primarily benefit local businesses and residents and to help build local capacity to the greatest extent possible.

## **Statement of Work**

1. Collection of Data
  - a. Organize and host a workshop at the Port of Argentina (POA) involving key staff and stakeholders to:
    - i. Communicate the methods, objectives, and battery limits of the study.
    - ii. Engage with participants in setting data collection requirements needed to quantify energy use and emissions.
    - iii. Identify Company, Industry, Regulatory Codes, Standards, Policies related to decarbonization of port activities.
    - iv. Facilitate collaboration in moving forward with the study.
  - b. Inventory current baseline energy use and relevant sectoral assets under control of Port and key stakeholders to quantify Scope 1 and 2 GHG emissions associated with operations at the Port.
2. Forecast Business-As-Usual (BAU) Energy Demand
  - a. Identify potential growth and expansion of Port services, and project demand for energy 10 years into the future.
  - b. Prepare a forecast range for low and high energy demand growth scenarios.
  - c. Prepare a BAU fuel mix projection and estimate associated emissions.
3. Characterize Emission Reduction (ER) Measures
  - a. Research current and emerging technologies and energy carriers that can be deployed to decarbonize port operations. This shall include a review of decarbonization measures of one or more ports identified by proponent and approved by POA.
  - b. Characterize peak electricity demand and expected energy use to evaluate the need for upgrade to electric service and identify deficits in firm power available from the utility grid.
  - c. For each ER measure, develop a database that includes fuel-use, CAPEX and OPEX, and other critical information identified in the research or by POA.
  - d. Undertake a detailed fleet analysis for POA looking at all vehicle types, for on- and off-road transportation assets.
  - e. Develop an optimal vehicle electrification plan, and the associated annual electrical energy and fuel use.
4. Evaluate Impact of Electrification on Costs and Emissions
  - a. Based on the energy demand and technologies evaluated in the tasks above, develop a least cost optimization based on the BAU and Net-Zero scenarios using an Energy System Optimization model (e.g., Times, TEMOA, etc.) to calculate the cost and emissions based on BAU and Net-Zero scenarios.



- b. The model shall be provided to POA staff for further analysis and sensitivity testing.
  - c. The model shall characterize the optimal implementation of electrification and decarbonization technologies, in order to minimize costs of transition, subject to constraints developed in collaboration with POA staff.
5. Identify Management System Controls
- a. New policies and administration controls (Communication Protocol, Technical Information Guide, QHSE, Rate Schedules, Best Practices, etc.)
  - b. POA Certification i.e., Green Marine Certification, Smart Port
  - c. Industry Trends
6. Deliverables
- a. Within 13 (thirteen) weeks from project authorization, prepare and deliver a draft report, submitted to POA for review and comment.
  - b. Report shall include, but not be limited to, a:
    - i. MS-Excel Workbook that characterizes BAU fuel use and emissions inventory.
    - ii. MS-Excel Workbook that characterizes Electrification and Decarbonization Measures.
    - iii. MS-Excel-based tool showing BAU and Decarbonization Scenario Costs, Emissions, and Energy Use Impacts.
  - c. Prepare and deliver a final report within 1 (one) week of receipt of POA comments.

## **Proposal Content**

Proposals should provide detailed information on each of the following:

1. Managerial
  - a. the name and address of the bidder submitting the proposal
  - b. the structure of the project team including the project manager and that person's experience in managing similar projects
  - c. the name, curriculum vitae, proposed roles and level of effort of all individuals to be engaged in completing this work. No substitutions of key personnel will be permitted once the contract is awarded without the written approval of the client
  - d. an outline of the consultant(s) expertise and work experience in conducting work of this nature, particularly in the energy sector
  - e. examples of similar projects undertaken

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## 2. Technical

- a. a detailed work plan including methodology, description of the work to be completed, a schedule with key project milestones, and information sources to be used in conducting the work
- b. a discussion of the anticipated level of effort and detail in the research that the bidder considers appropriate for this project
- c. any additional information, research and analysis that will be provided beyond the scope of work in the RFP, but which in the opinion of the bidder is relevant to this work
- d. the scope of any add-ons to the stated scope of work, the rationale for proposing them and any other deviations from the RFP together with reasons

## 3. Financial

- a. a breakdown of the level of effort and study costs by major task in each study phase
- b. a summary of the number of days that will be charged in relation to each person who will be working on the project and their per diem rates
- c. identify the incremental cost of any proposed add-ons that are not part of the base bid for this contract
- d. the expected cost of all travel and expenses associated with this work and the basis on which they will be charged (for example will they be at cost or is there an administrative fee)
- e. all costs should be quoted in Canadian dollars exclusive of HST

## 4. Other

- a. Any other information that the bidder considers to be relevant to their proposal and this RFP

## **Proposal Evaluations**

Proponents that score the highest points (maximum 720 points total (i.e. Technical + Cost)) will be eligible to enter into contract negotiations with POA. Failing to reach agreement following negotiations with POA, the proponent with the next highest score will be eligible for contract negotiations.

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**Part A – Technical Criteria**

The following table sets out the criteria, categories, and allocation of points available. Proponents will be assigned scores for each criterion that sum to an overall score. Proponents must meet or exceed the minimum point thresholds presented for both the individual criterion and overall scores. Proposals that do not meet the specified minimum thresholds will not proceed to the next stage of the evaluation process.

Criteria		Technical	Pertinent Questions	Maximum Points Available	Minimum Performance Threshold
i.	Organizational Experience and References		Q1, Q2, Q3	120	80
ii.	Project Team Qualification		Q4	50	40
iii.	Project Plan – Port of Argentina Context		Q5, Q6	100	80
iv.	Project Plan – Approach		Q7, Q8	100	80
v.	Project Plan – Activities		Q9	50	40
vi.	Project Management – Timelines		Q10	100	80
vii.	Project Management – Resourcing		Q11, Q12	100	80
Total Points from Technical Criteria				620	480

Questions will be evaluated through a direct question and answer format. Proponents shall provide written responses to each of the numbered questions and contain sufficient detail for the evaluation team to evaluate Proponents’ applicable expertise and capabilities.

Proposals that fail to provide a separate response to all questionnaire items will be deemed non-compliant. Please be advised that responses to questionnaire items that combine multiple questionnaire items into a single response may not be considered for evaluation.



## Questions

Q1 Provide a description of the Proponent's (and its sub-contractors, if applicable) organizational experience relevant to the scope of work and deliverables.

Q2 Proponents to list projects where they assisted in identifying optimal approaches to reducing Scope 1 and Scope 2 emissions.

Q3 Provide contact information (i.e. names, organizations, phone numbers, email addresses) for three referees representing clients that have obtained services similar to those requested in this RFP from the Proponent in the last five years.

Q4 Provide a description of the roles and responsibilities of each member of the proposed Project Team (and sub-contractors, where applicable) who will be involved in providing the Deliverables, including each member's pertinent skills, qualifications, and experience.

Q5 Describe the Proponent's knowledge and understanding of Port of Argentina's (POA) current operations, infrastructure, business needs and vision, as it pertains to the objective and deliverables.

Q6 Identify one or more ports with insight into their emission reduction/electrification programs that may suggest best practices to the Port of Argentina, including a brief rationale as to why the port was chosen.

Q7 Describe the proponent's analytical approach to assess the potential for electrification of the POA including potential methods and tools.

Q8 Describe the proponent's approach to effectively communicate the findings and recommendations of the study.

Q9 Provide a description of project activities related to the objectives and deliverables that assess the potential for electrification of the POA including the analysis of data collected by the proponent.

Q10 Provide a schedule of project activities in chronological order, showing each activity and its timeframes, including milestones and bi-weekly reporting periods, and ensuring the draft report is completed on or before January 20, 2024. Assume an award date of October 20, 2023.

Q11 Provide a resourcing plan that specifies how organizational expertise will be applied to each project activity, including proposed hours allocated to each project team member or position category. Preference will be given to a plan that maximizes participation of NL-based team members.

Q12 Provide an overview of any responsibilities to be subcontracted to third parties, including an overview of experience with that sub-contractor and any pertinent quality assurance parameters to be implemented.



Evaluation Scale - The following scale will be used as a guide to evaluate and score each response to questions. The Modifiers below will be used to multiply the Maximum Points Available for each of the seven Technical Criteria, both shown in the table above.

Modifier	Label	Description
1.0	Added value demonstrated	Response is compliant and content exceeds expectations.
0.7	Demonstrates criterion	Response is compliant and content is consistent with expectations.
0.4	Minor deficiencies	Response is compliant and content is mostly consistent with expectations, but certain response elements are missing or require improvement.
0.0	Major deficiencies	Response is non-compliant and/or content is inconsistent with expectations for a potential Contracted Supplier.

**Part B – Pricing Criteria**

Proposals that meet technical threshold limits above will be eligible for pricing evaluation.

A maximum of 100 points are available from pricing criteria, allocated through the following formula:

$$\text{Pricing Criteria Points}_{(\text{Proponent})} = 100 (X/Y)$$

Where: X = Proposed Price<sub>(Lowest)</sub>  
 Y = Proposed Price<sub>(Proponent)</sub>

Each Pricing must contain a value that presents the lump sum price for the deliverables (excluding HST). The evaluation will be based on the lump sum price only.

**Provincial Supplier Allowance**

A “provincial supplier” is defined as a supplier of goods or services that is established and has its headquarters in the province of Newfoundland and Labrador where it regularly conducts its business activities on a permanent basis.

For the purpose of evaluating pricing criteria, a twenty percent (20%) reduction may be applied to the pricing submitted by successful provincial suppliers who, for the purposes of this scope of work, will enter into contract negotiations with POA as the prime contractor. Determining eligibility for this price reduction will be at POA’s sole discretion and may be based on information and/or documentation requested and received by POA that confirms the status of the provincial supplier.



### **Other Terms and Conditions**

- a. The lowest bid price will not necessarily be accepted. The client is under no obligation to accept any proposal submitted.
- b. Contract award is dependent upon funding approval.
- c. All proposals will be considered strictly confidential.
- d. The successful bidder will be required to enter into a contract with POA for the completion of this work, including appropriate confidentiality clauses.
- e. There will be no payment for the preparation and submission of proposals for this project.

Questions may be submitted to: Ray Greene, Manager, Business Development & Marketing at:  
E-mail: [portelectrificationrfp@portofargentina.ca](mailto:portelectrificationrfp@portofargentina.ca)

Proposals will be accepted up to Friday, September 22, 2023 at 3:00 pm NDT.

Submit packages in confidence by mailing to:

Port of Argentinia Inc.

P. O. Box 95

Freshwater, NL A0B 1W0

Attn: Ray Grene, Manager, Business Development & Marketing

Or,

Proposals may be submitted by E-mail to: [portelectrificationrfp@portofargentina.ca](mailto:portelectrificationrfp@portofargentina.ca)