

Request for Proposals

Assessment of Atlantic Canadian Ports to Support Offshore Wind Development

RFP Release Date: August 20th, 2024

Proposal Due Date: September 24th, 2024

Contact:

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1. Introduction

Net Zero Atlantic (NZA) is an independent leading energy research organization advancing Atlantic Canada's transition to a low-carbon future. We are encouraging growth of a sustainable energy sector by identifying knowledge gaps, connecting experts to projects, and leading applied research. Our team is dedicated to an inclusive and successful clean energy transition in Atlantic Canada. Our focus is on credible and unbiased research that will best prepare policymakers, industry leaders and workers, and sector investors to work together on pathways to decarbonize our region's economy, mitigate climate change impacts, and move Atlantic Canada toward net-zero emissions.

NZA acknowledges the important role ports play in maintaining and growing our economies. Each port is as unique as the communities it is developed to serve. We also recognize Atlantic Canadian ports as being essential components of the specific infrastructure required to complete the energy transition underway now. Ports are key to sustainability and prosperity and are facing an opportunity to expand their capacities.

This project involves three offshore wind developers – Northland Power, Simply Blue Group, and Nova East Wind Inc. We are partnering with these industry partners to assess port infrastructure availability in Atlantic Canada and the necessary infrastructure upgrades to serve the emerging offshore wind (OSW) industry.

2. Context

Exceptional applied research is vital – To meet greenhouse gas emission reduction targets established for Atlantic Canada, experts are being called upon to provide credible and objective data and decision-making tools for our region to effectively implement a suite of decarbonization strategies.

Electricity generation as a core strategy – Decarbonization strategies include the use of renewable energy sources in electricity generation, the electrification of end uses, and the production and use of clean fuels (e.g., low carbon hydrogen), among others. These decarbonization strategies are expected to increase electricity demand in coming decades. This



future demand will need to be met by increased electricity generation that is low-emitting and sustainable.

Atlantic Canada's potential as a global leader in offshore wind – One option for low-carbon electricity generation lies in harnessing the potential of OSW in Atlantic Canadian waters. Atlantic Canada's OSW resource features high and consistent wind strength, attractive subsea geology, and opportunity for large-scale offshore wind sites. With the OSW industry in Atlantic Canada gaining momentum, there needs to be consideration around the practical aspects of delivering these large-scale offshore installations. Port infrastructure is widely recognised as an area requiring attention.

Ports and suitable port infrastructure are key to the successful delivery of OSW projects,

with turbine components and foundations transported through these gateways. Port locations serve as a link between marine and landside activities and often become a hub for supply chain activity. While it is well recognized that ports perform several critical functions within the OSW industry, there is a significant lack of information on port infrastructure capabilities in relation to anticipated OSW needs for Atlantic Canada.

We need to know what capacity and capabilities Atlantic Canadian ports can provide.

With this goal in mind, NZA is requesting proposals for a report that:

- 1. Informs OSW developers and investors, both the private sector and government, of port infrastructure investment opportunities to support the development of OSW in Atlantic Canada.
- 2. Provides an overview of the OSW industry and the market conditions in Atlantic Canada, with anticipated timescales for project development and the forecasted demand for port services.
- 3. Establishes the requirements from the OSW industry for port infrastructure to enable fixed-bottom and floating wind projects to be developed in Atlantic Canada.
- 4. Provides a profile of each participating port, including any development plans for infrastructure to support the OSW market.



- 5. Provides an assessment of available and proposed infrastructure at each participating port in relation to the benchmark requirements for both fixed base and floating OSW. This should include an estimate of the anticipated investment needed at each port to meet service requirement gaps and discuss gaps within a regional context.
- 6. Delivers a set of conclusions and recommendations based on the study findings.

3. Objective

The objective of this RFP is to obtain the services of a consultant (the Proponent) to develop a comprehensive public facing report that provides infrastructure investors, OSW developers, federal and provincial policymakers, port owners and operators, and other stakeholders with the information necessary to deepen their understanding of port infrastructure availability in Atlantic Canada and the necessary infrastructure upgrades to serve the emerging OSW industry.

4.0 Scope of Work

The report must include the findings from the following six distinct project tasks:

- Port Screening
- Industry & Market Analysis
- Port Requirements
- Port Profiles
- Ports Assessment
- Conclusion & Recommendations

It is important to note that findings from each project task will be central to establishing integrity for the subsequent phases of this study, thus the Proponent should ensure that the analysis and reporting clearly demonstrates how findings from each project phase were used in subsequent phases.

NZA expects analyses to be comprehensive in nature. The way in which the final deliverable is structured, however, is at the discretion of the Proponent.



4.1 Task 1: Port Screening

The Proponent will provide a set of screening criteria, considering critical features needed to support OSW services. These screening criteria will be reviewed and approved by the Project Management Committee (PMC). The Proponent will then use the screening criteria to create a list of ports for each of the Atlantic Provinces. NZA will participate in engaging with the ports and support an open call for port participation into the project.

Steps	Step Title	Step Description
1.	Develop Screening Criteria	Develop a set of screening criteria based on critical features needed to support OSW, such as channel depth, channel width, air restrictions, etc.
2.	Shortlist of Ports	Based on the criteria developed and agreed upon by the PMC, develop a short list of ports for each of the Atlantic provinces by conducting a desk-based assessment.
3.	Port Engagement and Open Call	An open call for participation based on the criteria will be shared via NZA communication channels to ensure all eligible ports are identified and screening methodologies are transparent. The Proponent will support the call and lead engagement with screened ports to verify inclusion and willingness to participate in the study.



4.2 Task 2: Industry & Market Analysis

The Proponent will provide a set of overviews of the OSW industry and inform on the demand, target market, and required timing for port services to meet the evolving demands of the Atlantic provinces and OSW industry.

Steps	Step Title	Step Description
1.	Overview of Industry	Provide an overview of the OSW industry. Discuss fixed-base and floating OSW variations, and vessel requirements, along with any other information needed to inform the reader.
2.	OSW in Atlantic Canada	Provide an overview of OSW development plans for Atlantic Canada. Inform on the timing and demand for port services.
3.	OSW Opportunities for Atlantic Canada	Provide an overview of OSW development outside of Atlantic Canada that Atlantic Canadian ports could support. Inform on the timing and demand for port services.



4.3 Task 3: Port Requirements

The Proponent will establish port infrastructure requirements through desk-based research and by engaging with industry (OSW developers, supply chain and equipment providers) at each stage of project development for fixed-bottom and floating wind projects.

Steps	Step Title	Step Description
1.	Role of Ports in OSW	Provide an overview of the role of ports in OSW. Focus on staging and marshalling for fixed-bottom and floating. Discuss fabrication and assembly, operations and maintenance, and the potential role of smaller ports for OSW.
2.	Key Port Considerations	Provide the key considerations and constraints for ports supporting the various functions for OSW. Ensure turbine specification and vessel requirements are factored into these considerations.
3.	Fixed-Bottom & Floating Wind Requirements	As the needs of both fixed and floating wind vary, distinct sets of port criteria will be needed for each. Engagement from OSW developers, contractors, and equipment and supply chain providers will be needed to inform on requirements. Minimum and preferred criteria should be considered.



4.4 Task 4: Port Profiles

The Proponent will provide a comprehensive and accurate record of the existing and proposed infrastructure at each of the participating ports. To do so, the Proponent will gather the necessary information from each of the ports. Data should be validated by desk-based review and follow-up engagement where possible. Profiles will be distributed to each port for comment prior to finalizing, allowing for verification of data and agreement on information included.

Steps	Step Title	Step Description
1.	Port Engagement	Informed by the requirements for fixed and floating OSW, collect the necessary information from the ports. Interviews and meetings should be conducted to supplement collection methods. Travel to port sites must be considered where possible.
2.	Map of Ports	Show all participating ports on a map of Atlantic Canada.
3.	Port Qualitative Review	Provide an overview, background, main features, development plans, and any other key qualitative information for each port. Information from ports should be validated wherever possible.
4.	Port Quantitative Review	Provide data on key quantitative characteristics for each port. Information from ports should be validated wherever possible.



4.5 Task 5: Port Infrastructure Assessment

Complete an assessment of the available and proposed infrastructure in relation to the benchmark requirements for both fixed and floating OSW as per the research completed and consultations with the OSW industry. Indicative costing and timing of port infrastructure upgrades necessary to meet the OSW requirements should be presented.

Steps	Step Title	Step Description
1.	Port Infrastructure Assessment – Existing	Provide an assessment for the suitability of the existing infrastructure at each port based on the key fixed bottom and floating criteria outlined previously.
2.	Port Infrastructure Assessment – Development	Provide an assessment for the suitability of the proposed infrastructure at each port based on the key fixed base and floating criteria outlined previously.
3.	Port Assessment of Proposed Infrastructure Upgrades	Provide indicative cost and timing for ports to become OSW ready based on gaps present in the infrastructure assessment.
4.	Collective Assessment	Provide an assessment of the region as a whole and what gaps are present.



4.6 Task 6: Conclusion and Recommendations

Deliver a set of conclusions and recommendations based on the study's findings. Explain how the report's findings tie into provincial OSW plans and any implications for meeting net-zero targets.

Steps	Step Title	Step Description
1.	Conclusions	Provide a summary of the report's findings and relate this back to provincial OSW and net-zero targets and a regional context. Describe funding supports and challenges faced by ports and make clear the investment needed to meet OSW timelines.
2.	Recommendations	Deliver a set of recommendations based on the study's findings.

4.7 Stakeholder Approach

The Proponent will work collaboratively with NZA to develop a framework for engaging appropriate stakeholder groups. This framework should outline the engagement process structure and implementation strategies, and a proposed timeline. The Proponent will also be responsible for developing materials for meetings, with time allotted for review and input by the PMC. The PMC will support the Proponent throughout the engagement process by reviewing materials for and attending meetings, as well as assisting in providing responses to questions that arise. The engagement plan will require approval of the PMC. The Proponent will carry out the plan in close collaboration with NZA and the PMC.

The engagement framework should consider the following components:



- The framework should address when and how to involve stakeholders in consultation or information sharing.
- The Proponent should collaborate with NZA and the PMC to identify stakeholder groups to engage for each project task.
- Engagement should be tailored to the needs of varying interest groups.
- Engagement efforts must consider travelling to port site where possible.

The Proponent should also propose a communications plan for the project. This plan should propose necessary communications tools and recommend an approach and timeline for their creation and use. The plan will require time allotted for gaining approval from NZA and the PMC. Executing the communications plan will be a collaborative effort between the Proponent, NZA and the PMC.

5. Deliverables

The Proponent is required to attend PMC meetings and provide updates on the project at a frequency suggested by the Proponent and approved by NZA and the PMC. As the project progresses, the Proponent will provide:

- I. **An Interim Report** presenting the results of task 1, 2, and 3. A report with the PMC having the opportunity to provide comment and recommendations ahead of proceeding with the port assessments.
- II. A Public Facing Final Report presenting the results of the scope of work stated above (Tasks 1 through 6). Both draft and final versions of these reports are required, with the PMC having the opportunity to recommend reasonable modifications to the draft report for inclusion by the Proponent in the final version prior to project completion.
- III. **PowerPoint Presentations** to the PMC and other key stakeholders to accompany the submission of the final report versions.
- IV. All relevant data files supporting the study.



6. Timelines

The following timeline outlines Net Zero Atlantic's expectations:

Project Timelines		
Item	Date	
RFP Release Date	August 20 th , 2024	
RFP Q&A Close Date	September 12 th , 2024, at 2pm	
Proposal Due Date	September 24 th , 2024, at 2pm	
Project Award Date	October 11 th , 2024	
PMC Project Status Meetings	Monthly at minimum	
Interim Report	January 31 st , 2025	
Final Report	June 13 th , 2025	

Engagement, meetings, and presentations will occur through virtual and/or in-person delivery. The Proponent is expected to provide an updated timeline showing details of these sessions to the extent possible.



7. Project Funding

Funding available for this project is capped at a maximum of CAD \$210,000.00, including related travel expenses but excluding taxes. Proposals that exceed this amount will not be considered. Note that proposals will be rated first in terms of experience/team/work plan and second in terms of value.

8. Respondent Qualifications

The successful applicant must:

- Have a demonstrated capability to conduct comprehensive studies with respect to port infrastructure and OSW-related work.
- A thorough understanding of the unique opportunities and challenges within the Atlantic Canadian region.
- Showcase an ability to engage with relevant stakeholders and access necessary data.

9. Proposal Requirements

- The proposal should be concisely worded with clearly described objectives, methods, budget, schedule, and deliverables. The proposal should include a workplan outlining how all the tasks will be approached.
- The proposal should include a description of the Respondent's organization and its relevant experience with similar projects. The Respondent must also describe the relevant work experience of the key staff assigned to this project and their roles on the project. This material should be summarized in the body of the proposal and can be presented in more detail, if needed, as an appendix.
- The Respondent should provide a detailed budget including project tasks, team member daily or hourly rates, and their intended number of days/hours to work on each project component.
- A single electronic document is sufficient. Please ensure the proposal or cover letter is signed by an officer or equivalent with authority to bind the Respondent to the statements made in the proposal.



 The electronic copy should be uploaded in PDF format to the Net Zero Atlantic-FTP site available at -[https://netzeroatlantic.sharefile.com/r-ra112988ef0354f728d667896bcfbd7ac].

10. Questions and Clarifications

Net Zero Atlantic will accept content-related questions from interested applicants on an ongoing basis until September 12th at 2pm. Please email the Project Manager, Ryan Keating, at <u>ports@netzeroatlantic.ca</u> with any questions prior to this date. Additionally, a Q&A page will be available on the Net Zero Atlantic website [https://netzeroatlantic.ca/opportunities/request-proposals/assessment-atlantic-canadian-ports]. The names and organizations of those submitting questions will remain anonymous; only the question and Net Zero Atlantic's response will be posted. Interested parties are encouraged to check the Q&A page for updated information and/or clarifications that may help in completing their proposal. The Q&A page will only be available if content-related questions have been received.



11. Evaluation

This project will be administered through Net Zero Atlantic. The rubric below demonstrates the weighting associated with each proposal component. Proposals will be quantitatively evaluated against a set of criteria developed by the PMC. Respondents should demonstrate good value for money but note the lowest cost will not necessarily be selected.

Factor	Weight
Experience and Knowledge: Qualifications, experience, and capabilities of the company and delivery team; demonstration of knowledge relevant to this study.	40%
Project Plan, Approach and Methodology: Respondent demonstrates an understanding of the project service requirements and has outlined a comprehensive and effective work plan. Proposal describes the objectives, methodology, milestones, and deliverables, and a sound approach in undertaking this project. Communication format and frequency between the Respondent and Net Zero Atlantic are clearly described. Respondent describes an achievable schedule and demonstrates the ability to complete the work on or before the desired completion date.	40%
Proposal Presentation and Organization: The proposal includes all RFP requirements and tasks, demonstrates attention to clarity, grammar, presentation, and comprehensibility.	10%
Value: The project offers good value for the proposed budget. The budget is clear, convincing, and well-described.	10%
Total:	100%

Please Note: NZA reserves the right to fully award, partially award or not award the Assessment of Atlantic Canadian Ports to Support Offshore Wind Development Project.