Request for Proposals

Analysis of Opportunities for Domestic Clean Fuels Use in Newfoundland and Labrador



RFP Release Date: June 26, 2024 Proposal Due Date: July 30, 2024

Background

Newfoundland and Labrador (NL)'s rapidly emerging clean fuels industry is establishing the province as a clean energy supplier on a global scale.

While the export of clean fuels will help the fight against climate change internationally, it is important to consider what the environmental benefits can be here at home. With renewable diesel production already occurring in the province and it being likely that hydrogen and derivatives like ammonia will be produced in the years ahead, how might these clean fuels be used within Newfoundland and Labrador?

The domestic use of locally produced clean fuels can not only help the province meet its climate change objectives and achieve net zero by 2050 commitments, but will also support an important emerging industry and have the potential for economic development and innovation impacts.

Potential applications for clean fuels use in NL are already known at a high level, but more work is required to evaluate the environmental benefits and economic impacts of fuel switching within specific sectors.

Objective

The primary objective of this consultancy is to determine and evaluate the most promising clean fuels adoption opportunities across various sectors in NL. This will be achieved through an analysis of environmental benefits, economic impacts, and potential challenges associated with applications which will be pre-defined. For the purposes of this study, the term 'clean fuels' is inclusive of hydrogen and its derivatives and low-carbon biofuels.

Scope of Work

The following focus areas of NL's economy will be evaluated for clean fuels adoption opportunities:

- Marine transportation
- Heavy-duty transportation
- Public transportation
- Heavy industry (mining, manufacturing)
- Remote communities
- Port operations
- Aviation
- Electricity grid integration

The successful consultant will be provided with contacts and context for each of these focus areas, but will also be expected to bring their own experience, resources, and insights forward to complete the analysis.

The analysis will be accomplished through six (6) activities:

1. Project Design

The proponent will work with *econext* to identify and engage key informants for each of the focus areas. Based on data provided by informants, the proponent will design a methodology to estimate the potential volume for clean fuels use in each focus area.

2. Environmental Impact:

The proponent will quantify the environmental impacts of clean fuels use by determining the greenhouse gas (GHG) emission reductions associated with each opportunity and identifying other positive and/or negative environmental outcomes. Other outcomes could include waste management or air quality (e.g., NOx, sulfur dioxide, VOCs, etc.) implications. Methodology (i.e., math, formulas) used to reach conclusions and the data produced will be provided to *econext*.

3. **Economic Analysis**:

The proponent will conduct an economic analysis for each opportunity to evaluate its potential for adoption. Preliminary estimates will be made on the capital and operating costs of clean fuels adoption in each sector based on available information in the public domain. The economic analysis should be inclusive of relevant incentives/disincentives such as investment tax credits, carbon pricing, clean fuels regulations, the provincial Wind-Hydrogen Fiscal Framework, etc. Methodology (i.e., math, formulas) used to reach conclusions and the data produced will be provided to *econext*.

4. Challenge Assessment:

The proponent will detail potential hurdles associated with each domestic clean fuels adoption opportunity, including regulatory and permitting considerations, infrastructure requirements (e.g., distribution networks), and the province's unique geographic context (e.g., its large geographic area and relatively small population), and industry constraints. Methodology (i.e., math, formulas) used to reach conclusions and the data produced will be provided to *econext*.

5. Recommendations:

The proponent will comment on the highest-value clean fuels adoption opportunities for NL based on environmental benefits, economic considerations, challenges assessed, and total volume of fuels that could be used. The proponent will propose likely time horizons for the adoption of clean fuels in each focus area based on analyses. The proponent will identify other opportunities for clean fuels adoption that were outside of the scope of work but could be investigated further.

6. Stakeholder Workshops

The proponent will present at eight (8) interactive workshops with stakeholder groups from each focus area with the dual intent of (1) ground-truthing preliminary/draft findings and (2) educating and creating awareness of the future opportunities that clean fuels adoption presents. *econext* will coordinate the logistics for the workshops and invitation lists.

The consultant will meet with the client on a bi-weekly basis to provide progress updates and to work with the client to address any barriers that arise. These meetings may take place in person or virtual, pending location, cost, schedules etc.

Deliverables and Timing

Deliverable 1:

A draft report detailing the consultant's findings on domestic clean fuels usage opportunities within NL, covering all focus areas.

Deliverable 2:

A presentation of the draft report to the client, facilitating discussion and addressing questions.

Deliverable 3:

A final report, incorporating feedback received on the draft report, detailing the consultant's findings on domestic clean fuels usage opportunities within NL. Thie final report will include recommendations on how to advance the highest-value opportunities, accompanied by a presentation to the client.

Deliverable 4:

Presentation at eight (8) facilitated workshops to be organized by *econext* to (1) ground-truth research findings and (2) educate and create awareness of the future opportunities that clean fuels adoption present for NL.

Timeline (anticipated):

RFP Release Date: June 26, 2024
Proposal Due Date: July 30, 2024
Project Kickoff: September 4, 2024
Draft Report: December 18, 2024
Final Report: January 24, 2025
Workshops: February - May, 2025

RFP respondents should be ready to execute a project agreement immediately upon contract execution, with the understanding that the client is motivated to complete this work as time-efficiently as possible.

Evaluation Criteria

Submissions will be evaluated according to the following criteria:

- Knowledge and experience in relation to the work: demonstrated ability to meet expectations based on completion of similar projects and/or quality of previous works, including primary team member details.
- Understanding of the scope and objectives of the project: demonstrated comprehension of/adherence to the RFP.
- Proposed approach/workplan: including methodologies or frameworks to be used in the environmental and economic analyses, detailed timeline, and project milestones.
- Identification of potential risks to achieving the project's objectives and mitigations/contingencies to address them.

- Knowledge of and experience working with or within Newfoundland and Labrador's electricity and/or energy industries.
- Price: value of work proposed versus identified costs.

Proposal Submissions

The contracting organization for this RFP is *econext*. A single electronic document is sufficient. The proposal should be no longer than four (4) pages, and be concisely worded with clearly described objectives, methods, timelines, and outcomes. The proposal must acknowledge and fully accept the terms and conditions as laid out in this RFP.

Supporting documentation may be appended. Suggested appendices include (1) brief descriptions of the respondent's company/relevant experience with similar projects, and (2) a description of the relevant work experience of the staff assigned to this project.

The electronic copy of submissions should be in DOC and/or PDF format, and sent to Colin Corbett, econext's Director, Clean Energy Innovation, via email at corbett@econext.ca no later than 17h00 NDT July 30, 2024. Questions from interested applicants can be directed to the same address. Any additional clarification or information will be shared with all proponents.

Budget

The maximum budget available for this contract is \$140,000 (exclusive of HST). Respondents are expected to provide detailed budget breakdowns in their submissions.

Terms and Conditions

- All proposals received will be considered strictly confidential;
- The lowest cost, or any proposal, will not necessarily be accepted;
- Proposed costs must be represented in Canadian dollars;
- Applicants must be a company or organization of legal entities validly incorporated or registered in Canada, with work being undertaken in Canada;
- No payment will be made for the preparation and submission of proposals for this project;
- No fee will be made on the cost of work incurred to remedy errors or omissions for which the consultant is responsible; and
- econext reserves the right to meet with all, or any, of the applicants during the proposal evaluation stage to clarify information in the submissions and seek additional detail which may be used in the evaluation.