



## Pacific Northwest Economic Region

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### **Request for Qualifications (RFQ) Pacific Northwest Hydrogen Analysis Consultant PNWER Canada**

#### **Background**

The British Columbia (BC) Ministry of Energy, Mines and Low Carbon Innovation and the Washington (WA) State Department of Commerce are executing the completion of a *Pacific Northwest (PNW) Hydrogen Analysis*. The Pacific Northwest Economic Region (PNWER) has been contracted to lead this project and ensure that the scope of work provides deliverables that are valuable to government, Indigenous peoples, academia, hydrogen industry associations and other BC and WA partners and stakeholders.

#### **Pacific Northwest Economic Region (PNWER)**

PNWER is a statutory non-profit organization chartered by Alaska, Idaho, Montana, Oregon and Washington and the western Canadian provinces/territories of British Columbia, Alberta, Saskatchewan and Yukon and Northwest Territories. PNWER is a leader in regional clean energy and hydrogen collaboration planning. Its mission is to increase the economic well-being and quality of life for all people of the region, while maintaining and enhancing our natural environment. PNWER Canada Inc represents PNWER in Western Canada and serves as the lead on this project.

#### **British Columbia (BC)**

In 2018, the Province introduced CleanBC as a path forward for British Columbia (BC) to reach its legislated climate targets and grow a prosperous low carbon economy. In November 2021, this plan was updated with the CleanBC Roadmap to 2030, outlining the steps the Province will undertake to achieve its emissions reduction targets for 2030 and prepare for net zero by 2050. To align with CleanBC commitments and targets, the BC Hydrogen Strategy, released in July 2021, clarifies how the Province will promote BC internationally as an attractive jurisdiction for investment in hydrogen, as well as develop regional hydrogen hubs.

#### **Washington State (WA)**

Washington State Department of Commerce completed a legislative report entitled “Green Electrolytic Hydrogen and Renewable Fuels: Opportunities for Deployment in Washington” in January 2024. This report identified an important role for the use of green hydrogen and hydrogen-derived fuels in Washington as the state moves towards a net-zero emissions economy by 2050. The report identifies that some of Washington’s hydrogen and renewable fuels demand may be imported, and identifies neighboring states that may provide supply. The study only used US data in its modeling so possible energy supply and demand interchange with other countries including Canada were not in scope.

The United States (U.S.) Department of Energy selected Washington, Oregon, and Montana’s Pacific Northwest Hydrogen (PNWH2) Hub proposal as one of the seven national Regional Clean Hydrogen Hubs selected for negotiations for an award of up to \$1 billion over eight years.

## **Purpose and Objective**

The purpose of this project is to deliver an analysis of opportunities for BC and WA to collaborate in developing hydrogen production and use in their jurisdictions. This will add to BC's Hydrogen Strategy and Commerce's recent Green Hydrogen and Renewable Fuels legislative report, and will assess specific opportunities for collaboration in relation to the U.S. PNWH2 Hub and hydrogen hub development in BC.

Regional hydrogen hub development should not be limited to within BC's or WA's borders. In addition to identifying cross-border collaboration opportunities, this project presents an opportunity to better understand PNW regional hydrogen investment attraction positions compared to other jurisdictions.

As part of the development of the *PNW Hydrogen Analysis*, the consultant will identify the following:

- The potential for BC, WA, and the other PNWER jurisdictions to collaborate on current and future opportunities and challenges for hydrogen production, distribution, and utilization.
- The opportunity to develop a cross-border hydrogen hub to accelerate the growth of the hydrogen sector.
- Opportunities to engage industry, Indigenous, academia, and local and provincial/state governments to explore hydrogen cross-border collaboration.
- The competitive strengths, opportunities, and barriers associated with hydrogen activities in BC and WA compared to other PNWER jurisdictions.

The objective of the project is to increase the adoption and knowledge of hydrogen among industry, including commercial producers and users, in BC and other PNWER jurisdictions. Completing this project will be of importance for achieving policy actions in BC and WA and advancing the hydrogen sector in both jurisdictions.

## **Technical Assistance Required**

PNWER seeks a qualified consultant to provide technical assistance to develop the *PNW Hydrogen Analysis*. The consultant will work closely with PNWER staff and the project steering committee to conduct a study focused on the future of hydrogen in our region. The following are the deliverables the consultant will help lead. The consultant should have a deep understanding of regional binational energy policy, and hydrogen production in relation to reduced carbon emissions for a cleaner energy transition.

## **Project Deliverables**

### **Deliverable 1: Pacific Northwest (PNW) Jurisdictional Scan and Preliminary Analysis (to be completed by June 28, 2024)**

- Complete a jurisdictional scan across BC, WA, and PNWER jurisdictions to:

- Identify successful policy mechanisms to allow for collaboration between jurisdictions.
- Compare and contrast regional investment attractiveness.
- Identify opportunities for collaboration between BC and WA governments, industry, and academia.
- Examine jurisdictions that have achieved successful cross-border collaboration and summarize lessons learned that could be applied to BC and WA.
- Identify and provide a preliminary assessment of current regulatory policies, incentives, barriers and opportunities for hydrogen molecules – including hydrogen-derived fuels for on-road, maritime, and aviation – and technology to move across the international and state/provincial borders (e.g., permitting, trade requirements, and the Inflation Reduction Act/Canadian Clean Hydrogen Investment Tax Credit).
- Compile preliminary findings and present information in a report format.
- Present preliminary findings and convene industry roundtable at PNWER Whistler Summit July 2024.

**Deliverable 2: Engagement Opportunities (to be completed by October 25, 2024)**

- Engage with industry, academia, tribes, Indigenous, local and provincial/state governments, community organizations and others to explore hydrogen cross-border collaboration.
  - The format for engagement activities could include, but is not limited to, interviews, meetings, and roundtable discussions.
  - The consultant will collaborate with PNWER to identify opportunities to participate in existing PNWER events and engage relevant stakeholders and partners (Including Vancouver Hydrogen Event, June 11, 2024 and PNWER Whistler Summit July 2024).
  - This is expected to include engagement with PNWH2 and projects within the H2Hub, as well as Indigenous communities and organizations in both BC and WA.
- Leverage existing relationships with First Nations/tribal communities (both in Canada and in the United States) and the First Nations Major Project Coalition to understand how First Nation/tribal communities can participate in cross-border hydrogen sector development.
  - Support one on one meetings as well as participating in Affiliated Tribes of Northwest Indians (ATNI) to seek to provide updates and engage with participating tribes, including but not limited to those with a presence in WA.
- Prepare a ‘What We Heard’ report to summarize the engagement opportunities and the feedback received from participants.
- Findings from these engagements are to be used to inform the analysis under deliverable 3.

### **Deliverable 3: PNW Hydrogen Analysis (to be completed by December 6, 2024)**

- Assess the opportunity for BC and the PNWH2 Hub states to collaborate on the following:
  - Opportunity to import/export hydrogen, hydrogen derivatives (i.e. ammonia, methanol, and others), and associated technologies between jurisdictions with considerations of how stranded assets can be avoided.
- Model hydrogen supply and demand in BC, WA, Oregon and Montana to identify and quantify hydrogen production and offtake opportunities in the short, medium, and long term.
  - Including development of annual estimates and projections of hydrogen supply and demand (in tonnes) out to 2050; and quantify in terms of economic output or other economic/financial indicators and compare with or benchmark against other sectors.
- Identify the opportunity for BC and WA companies to export/import hydrogen and hydrogen technology across the Canada-US border to each other.
  - How BC and WA companies can benefit from the Inflation Reduction Act and associated incentives. This should include analysis about 45V rules once finalized, and how state/provincial governments can support access to this incentive.
  - How environmental attributes can be tracked as hydrogen is imported and exported between jurisdictions.
  - Opportunity to leverage the green shipping corridor between Washington and BC ports.
    - Including incorporating review and analysis of studies and projects such as Washington Maritime Blue's forthcoming report on Sustainable Maritime Fuels.
  - Opportunity for knowledge-based development and academic knowledge exchange.
- Based on the engagements and analysis, provide recommendations for next steps for collaboration and to keep momentum going for growth in the BC and PNWH2 Hub state hydrogen economies.
- Provide broad recommendations for the sector as well as specific recommendations for the governments of BC and WA.
- Develop at least three case studies of hydrogen companies with existing or planned hydrogen projects that involves cross-border work (e.g., BC company working on project in WA, or vice versa).
  - Conduct targeted interviews with companies and detail lessons learned and opportunities to improve future cross-border work for similar projects in the future.
- Compile findings from deliverables 1, 2, and 3, in a report format.
- Develop a one-pager of key findings and a summary slide deck, presenting key information from the report (to be completed by December 15, 2024).
  
- Present the key findings in a minimum of two webinars, prior to conclusion of the contract.

### **Qualifications Submission Information:**

1. Introductory letter describing your relevant experience and overview of qualifications. Provide past related project examples, and outcomes that could be leveraged. (3 pages max, standard format 8.5x11 with 1 inch margins).
2. Resumes or extended Curriculum Vitae of proposed staff (no page limit).
3. Provide project workplan, Gantt chart and engagement strategy. Assuming May 27, 2024 start and December 15, 2024 completion. (7 page max)
4. Rate sheet and proposed budget. (1 page max)
5. A minimum of 3 references from past projects (1 page max).
6. Top candidates may be selected for a follow-on virtual interview.

**Budget:** The maximum budget for this project is not to exceed \$300,000 CDN (including applicable taxes and associated expenses). Applicants must acknowledge they can produce the above referenced deliverables within this budgeted amount.

The RFQ should not be construed as an agreement to purchase goods or services. The lowest priced proposal will not necessarily be selected. The RFQ does not commit PNWER in any way to award a contract.

### **Deadline**

Submissions will be accepted until May 15, 2024 at 11:59pm Pacific Time. Proposals will only be accepted by email. Please send proposals by email to Doug MacLaren, Project Director at [doug.maclaren@pnwer.org](mailto:doug.maclaren@pnwer.org)

### **Questions**

Questions must be submitted in writing via email no later than 5pm May 9<sup>th</sup> to [Doug.maclaren@pnwer.org](mailto:Doug.maclaren@pnwer.org). Responses to all questions will be available upon request after May 10<sup>th</sup>.

*PNWER and PNWER Canada are equal opportunity employers and will not discriminate against any employee or applicant on the basis of age, color, disability, gender, national origin, race, religion, sexual orientation, veteran status, or any classification protected by federal, provincial, state, or local law.*