

# What is the Atlantic Hydrogen Alliance?

"The world's energy systems are undergoing radical transformation driven by the need to mitigate climate change. Development of an at-scale, clean hydrogen economy is a strategic priority for Canada, needed to diversify our future energy mix, generate economic benefits and achieve net-zero emissions by 2050."

- <u>Hydrogen Strategy for Canada</u>: December, 2020.

The role of low-carbon hydrogen in the decarbonization of energy systems is becoming clear, but our understanding of hydrogen's commercial applications and emerging economic development opportunities are only now coming into focus. Governments around the world, including the government of Canada and several provinces, are developing and executing hydrogen strategies that are building global momentum. But Atlantic Canada is falling behind - the time to develop a clean hydrogen economy in Atlantic Canada is now.

Two recent studies provided a technical and economic assessment of the role that hydrogen can play in Atlantic Canada's energy transition towards a net-zero future. The Feasibility Study of Hydrogen Production, Storage, Distribution, and Use in the Maritimes and the Feasibility Study of Hydrogen Production, Storage, Distribution and Use in Newfoundland & Labrador determined that hydrogen has the potential to be an essential part of the energy mix in Atlantic Canada – meeting up to 22% of energy demand by 2050 - while closing decarbonization gaps in sectors where GHG emissions will be difficult to abate. Atlantic Canada, especially Newfoundland & Labrador, has the potential to be a major producer of hydrogen to serve demand within the Atlantic region and for export to international markets. These studies also concluded that our region faces challenges that must be addressed for hydrogen to reach its potential and critical policy and infrastructure investments must be made in the near-term to initiate hydrogen development in Atlantic Canada.

In the pursuit of regional hydrogen opportunities and to address the challenges, the **Atlantic Hydrogen Alliance (AHA)** has been created to support the development of an economically viable clean hydrogen value chain that will enable the transition to a prosperous low-carbon economy in Atlantic Canada.

Work of the AHA will focus on four key deliverables that will be supported by dedicated Working Groups The deliverables are to:

 Complete an Atlantic Hydrogen Roadmap that describes the optimal low-carbon hydrogen production methods, distribution systems, and end-uses for the development and deployment of hydrogen in Atlantic Canada. The Roadmap will lead to a thorough understanding of hydrogen supply and demand in Atlantic Canada and international hydrogen demand opportunities that could be supplied by Atlantic Canada. Responsible: Roadmap Working Group.

- 2. Identify and develop the key enabling conditions for hydrogen development in Atlantic Canada, including policies, regulations, codes, and standards. This work will be developed through collaboration with regional and national stakeholders and hydrogen experts. Responsible: Enabling Conditions Working Group.
- 3. Facilitate the creation of one or more hydrogen 'hubs' in Atlantic Canada to develop and deploy local hydrogen projects across the full hydrogen value chain by identifying and establishing a pipeline of potential pilot, demonstration, and commercialization hydrogen projects, including project scope, funding requirements, timeline, project developers, and partners. Hydrogen hubs create a framework for the strategic coordination of public and private investments that enable a scale of hydrogen production, storage, transportation, and demand capable of achieving long-term economic viability. Responsible: Hydrogen Hubs Working Group.
- 4. Develop and execute a communications, engagement, and advocacy plan that will support the other three deliverables. The plan will promote the development of hydrogen in Atlantic Canada through regular communication with stakeholders and the public, advocacy, and engagement with government and other key stakeholders to raise awareness of the economic and environmental potential for hydrogen in the region. Responsible: Marketing & Communications Working Group.

Oversight and governance of the AHA is provided by an Executive Committee (EC) that currently consists of senior leaders from the Port of Halifax, Heritage Gas, Liberty Utilities, Saint John Energy, Atlantica Centre for Energy, Deloitte, EcoNext, and Net Zero Atlantic (NZA).

### **Member Benefits**

Membership in the Atlantic Hydrogen Alliance is complimentary and offers several benefits:

- A powerful voice that is respected by Atlantic Canadian energy and environmental policy decision makers.
- Advocacy to promote the role that hydrogen can play in Atlantic Canada's future low-carbon energy system.
- The opportunity to contribute to the development of the hydrogen sector in Atlantic Canada.
- Connections to leaders and other stakeholders inf the hydrogen industry in Atlantic Canada.
- Regular newsletter updates on the progress of the work of the Alliance and on issues impacting the hydrogen sector in Atlantic Canada.

# **AHA Member Categories**

#### Core Members

Core Members are individuals and organizations that have a significant interest in the development of an economically viable hydrogen value chain in Atlantic Canada and are eager to contribute their skills and experience to advance the work of the AHA. The logos of Core Member organizations logos will be featured prominently on the AHA website and other materials, and they will be identified as hydrogen leaders to government, energy stakeholders, and the public. Core Members agree to:

- commit resources and information to advance the work of the AHA for a minimum of 2 years,
- participate in and contribute to the work of one or more Working Groups,
- promote and advocate on behalf of the AHA.

#### **Associate Members**

Associate Members are individuals and organizations that are interested in and support the development of hydrogen in Atlantic Canada. Associate Members may include hydrogen experts, participants in the energy industry, and environmental or energy-related not-for-profit organizations that are willing to occasionally contribute resources to support the work of the AHA. The names and/or logos of Associate Members will be included on the AHA website, if desired. Associate Members agree to:

- support the work of the AHA by reviewing work, project proposals, and reports by providing input and feedback,
- at their discretion, participate on or support one or more Working Groups.