Hydrogen British Columbia

333 Bay St.
#2400 Toronto, ON
M5H 2T6

P: (604) 281-1040
E: info@canadah2.ca
W: www.canadah2.ca

# Clean Hydrogen at the Legislature

## In Victoria

**May 7-9, 2025**

## Canadian Hydrogen Association

*Championing the British Columbia hydrogen sector for a low carbon world.*

# The Voice of the Sector

## Representing British Columbia Clean Hydrogen

Our mission is to champion the B.C. hydrogen sector and accelerate the adoption of our members' products and services, in B.C., Canada and abroad.

Hydrogen British Columbia (H2BC) is an affiliate of the Canadian Hydrogen Association (CHA) which is a national, non-profit association providing a unified voice for 200+ hydrogen and fuel cell stakeholders in Canada.

Comprising industry, academia, research agencies, local governments, and other stakeholders, the association is focused on advancing the use of clean hydrogen and clean hydrogen technologies for a prosperous and low-carbon world.

# Message from the Chair of the Board

Dear Members of the Legislature Assembly and Government Officials,

As Chair of the Board of the H2BC, I want to extend our appreciation for your participation in Hydrogen Days at the Legislature. This is a crucial moment for the hydrogen sector, and your support is key to ensuring its continued growth and success.

H2BC plays a vital role as the unified voice of the hydrogen industry in British Columbia. Our work involves connecting stakeholders across sectors, advocating for policies that drive investment, and fostering the innovation necessary to build a competitive hydrogen economy. B.C. is leading on the global stage with innovation and real-world applications for both domestic and international markets. The hydrogen fuel cell sector has shipped to over 42 countries across the globe. This has been achievable through strategic partnerships between industry and government. From clean hydrogen production and carbon capture to emerging applications, H2BC is working to ensure that every region in B.C. can harness its unique strengths to contribute to this vision.

This week's conversations are not just about addressing immediate needs; they are about building a long-term thriving hydrogen ecosystem that will benefit B.C.'s economy, environment, and leadership in clean energy. We look forward to continuing this important collaboration and are excited for the future we can shape together.

Sincerely,

**Bob Blattler**

Chair of Hydrogen British Columbia

# Message from our Executive Director

Dear B.C. Members of the Legislature and Government Officials,

As Executive Director of the H2BC, I want to express my gratitude for this opportunity to meet with you during our Hydrogen Days on the Legislature. Building Canada's hydrogen industry is a shared goal, and your involvement is crucial in turning that vision into reality. At H2BC, we are committed to driving the growth of the hydrogen sector, but we know that meaningful progress requires a strong partnership between industry and government.

Hydrogen has the potential to transform B.C.'s clean energy landscape, with each province bringing unique strengths to the table. Whether its fuel cell technology, renewable hydrogen production, clean hydrogen paired with carbon capture and storage, or other innovative new applications, B.C. is well-positioned to lead. Together, we can build the infrastructure, shape the policies, and create a robust hydrogen economy that generates jobs, reduces emissions, and further cements B.C.'s leadership in clean energy.

I look forward to collaborating with you as we move forward. The conversations we're having this week are an important step, and I'm excited about what we can achieve together.

Sincerely,

**Todd Romaine**

Hydrogen British Columbia

Hydrogen British Columbia

# Backgrounder

# H2BC's principal goals for serving our members include:

1. Establishing H2BC as the leading voice in promoting the B.C. hydrogen industry's priorities and speaking with decision makers, policy makers and influencers interested in or responsible for B.C.'s clean hydrogen ecosystem.

2. Building and sustaining awareness and support at the provincial level to promote a shared understanding across government of clean hydrogen's pivotal role to grow and diversify B.C.'s economy and help meet B.C.'s decarbonization goals.

3. Work with governments to ensure laws, regulations, policies, programs, policies, directives, and funding initiatives enable and stimulate the production and use of clean hydrogen and provide companies with investment certainty.

## What We Do

H2BC champions provincial clean hydrogen and clean hydrogen solutions, products, and technologies and supports the scale-up and adoption of hydrogen and hydrogen technologies across the province through advocacy and government relations, communications, and business-to-business opportunity enhancement. These activities include:

# Advice and Advocacy

As the voice of the clean hydrogen sector in B.C., H2BC serves as a trusted advisor to government on provincial hydrogen matters and has close working relationships with provincial government departments and agencies, such as the Ministry of Energy and Climate Solutions, the Ministry of Jobs, Economic Development, and Innovation, and the BC Energy Regulator.

Established with the support of the Government of B.C., H2BC has received government funding to lead sector initiatives relating to hydrogen awareness, communications, outreach, and international business development. Furthermore, the CHA, via its provincial affiliate H2BC, has overseen B.C.'s Go Electric Hydrogen Station and Fleet Program for the provincial government since 2015.

# The Hydrogen Imperative

Two guiding principles for H2BC—and both B.C. and the global community—are the urgent need to reduce greenhouse gas (GHG) emissions to combat climate change and the importance of diversifying economies beyond reliance on a single income source. Transitioning to a broader mix of sectors supports sustainable economic growth and resilience.

In B.C., the CleanBC Roadmap to 2030 outlines the government's strategy to cut emissions by 40% by 2030, with the long-term goal of reaching net zero by 2050. A core part of this plan is accelerating the adoption of low-carbon fuels like hydrogen.
Due to its versatility, hydrogen presents one of the only viable clean energy solutions available for sectors that are difficult to electrify where fossil fuels are the main source of energy, such as heavy-duty transportation and industry. When produced from low-carbon feedstocks, hydrogen can achieve zero or near-zero emissions. Its integration into the energy mix not only supports climate action but also drives economic diversification by creating new opportunities from B.C.'s natural resources.

Clean hydrogen enables a variety of applications. For example, fuel-cell electric vehicles emit only heat and water, eliminating tailpipe emissions. In hydrogen-diesel dual-fuel systems, $CO_2$ emissions can be reduced by up to 80%, while hydrogen-powered internal combustion engines offer near-zero emissions without compromising power or range. Hydrogen can also be blended with natural gas to cut emissions in heating and power systems, and it can be converted into low-carbon fuels like ammonia, methanol, and synthetic fuels—supporting decarbonization across high-emission sectors.

The growth of B.C.'s hydrogen sector will not only support environmental goals but also foster economic development through innovation and resource optimization. To guide this growth, the *B.C. Hydrogen Strategy*, outlines the province's plan to promote and support the development of hydrogen production, use, and export. The strategy includes a series of actions designed to leverage the B.C.'s key strengths, including its abundant low-carbon energy, readily available geological storage capacity, and advanced technological expertise, to best position B.C. at the forefront of the global hydrogen economy.

# Hydrogen Jobs and Prosperity

The provincial government has identified low-carbon hydrogen as a cornerstone of B.C.'s clean energy future—essential for cutting emissions, driving economic growth, and achieving net zero by 2050.

According to the B.C. Hydrogen Strategy, hydrogen could reduce annual emissions by 7.2 megatonnes by 2050, which represents roughly 11% of the province's 2018 levels. The province already supports a skilled hydrogen workforce of 1,190 to 1,350 full-time equivalent jobs. As B.C. expands its hydrogen end-use value chain, including new production facilities and refueling infrastructure, significant job creation is expected across the sector.

Nationally, the ***Government of Canada's Hydrogen Strategy*** envisions hydrogen supplying up to 30% of end-use energy by 2050, positioning Canada as a global leader in hydrogen technology. This transition could generate over 350,000 high-paying jobs across the country.

B.C.'s rich and diverse energy feedstocks, leading innovation and industry position, established international collaborations, and energy export channels all position the province to capitalize on the growing global demand for hydrogen.

# CHA and the B.C. Advantage

B.C. is uniquely positioned to capitalize on the rising global and domestic demand for low-cost, emissions-free energy.

B.C.'s abundant resource wealth and diverse energy mix contribute significantly to wealth, delivering jobs, growth, and prosperity for British Columbians. More than 98% of B.C.'s electricity is renewable, which allows the province to leverage an existing clean energy feedstock to produce hydrogen via electrolysis. The province also has vast, low-cost natural gas reserves, accessible geological storage, and deep expertise in carbon capture and storage (CCS), making it a prime location for producing clean hydrogen from natural gas with permanent, responsible CCS.

B.C. is a global leader in hydrogen and fuel cell innovation, home to more than half of Canada's clean hydrogen and fuel cell companies. A major cluster in Metro Vancouver includes over 30 companies spanning the entire hydrogen value chain, employing 1,900+ people and generating over CAD $375 million annually. This thriving sector is supported by enabling provincial and federal policies to foster innovation, leading research institutions, specialized talent pipelines, and a network of accelerators and supportive regulations.

# H2BC and the Government of B.C.

## WORKING TOGETHER

The CHA and its member companies and organizations are committed to working with the Government of B.C. to realize the full potential of domestically produced, low-carbon hydrogen to meet B.C.'s ambitious emissions reductions targets, while also contributing to new job creation and economic growth. This collaboration between government and the private sector will significantly enhance B.C.'s ability to foster innovation, attract investment, and cultivate market growth, ultimately benefiting all residents of the province.

# Delegate Biographies

# Delegates to the Clean Hydrogen at the Legislature Meetings

## In Victoria

### May 7-9, 2025

## Colin Armstrong

President and CEO, **HTEC**

Colin is a professional mechanical engineer with more than 30 years of experience in the hydrogen sector.

He is a founder of HTEC and has led the company for over 10 years. Colin is the driving force behind the development of British Columbia's hydrogen station network, opening Canada's first retail hydrogen fueling station in 2018. Prior to HTEC, Colin led hydrogen initiatives at Sacré-Davey Engineering, including the $21 million Integrated Waste Hydrogen Utilization Project (IWHUP) and the 1,000-kilogram-per-day fueling station project for a fleet of fuel cell buses operating in Whistler. Colin was also an investor and the lead engineer at Dynetek Industries (high-pressure carbon fiber gas storage cylinders) and worked at Ballard Power Systems to develop fuel cell manufacturing systems. Colin has been on the Board of the Canadian Hydrogen and Fuel Cell Association since 2011 and currently chairs Hydrogen BC. Colin is a 2022 Clean50 Honouree.

## Catherin Becerra

Senior Manager, Climate Action Policy, **FortisBC**

Catherin Becerra is the Senior Manager, Climate Action Policy at FortisBC, where she is responsible for advancing the organization's climate action policy objectives. She leads engagement with both provincial and federal governments on key areas such as energy modeling, Renewable Natural Gas (RNG), hydrogen, and policies applicable to the transportation and industry sectors. Catherin also oversees the implementation of corporate initiatives that advance climate action.

Catherin has 15 years of experience across the utilities, renewables, oil and gas, and transportation sectors. She holds a Master's degree in International Energy from the Paris Institute of Political Studies, as well as a Bachelor's degree in International Business and Supply Chain Management.

## Aniket Bhatt

Associate, **FASKEN**

Aniket Bhatt is an associate in Fasken's Political Law practice and is also a member of the firm's Government Relations and Strategy practice.

Aniket has also served as the Director of Research for H2GO Canada, a not-for-profit corporation focused on accelerating the development of a market for hydrogen and remains an active advocate for renewable energy.

## Bob Blattler

Chief Executive Officer and Founder, **Cariboo Low Carbon Fuels**

Bob Blattler is the Chief Executive Officer and Founder of Cariboo Low Carbon Fuels. Bob has 40+ years executive experience in the petro-chemical and natural gas transmission sectors in commercial, project management and operations roles. Bob founded Cariboo with a vision to develop clean energy projects, providing sustainable long term social and environmental benefits that provides lasting benefits to the community. For Cariboo, he assembled a team of senior energy executives with the experience and capacity to deliver on Cariboo's objectives. Bob and the Cariboo team progress a suite of clean fuel and hydrogen projects in strategic locations.

## Dan Brock

Senior Partner, Chair Government Relations & Strategy Practice Group, **FASKEN**

Dan Brock is the Chair of the Fasken Government Relations & Strategy practice, and co-lead of the firm's recently launched Hydrogen Energy Advisory Team.

Specializing in advisory services, policy analysis, strategic planning, political intelligence gathering, coalition-building and government advocacy, Dan is a leading and respected figure in Canadian government relations. He has held several senior advisory positions with federal Ministers of Environment, Justice, Finance, and has worked as Principal Secretary to the Leader of the Official Opposition.

## Pranav Chandrasekar

Engagement Manager, **Canadian Hydrogen Association**

Pranav serves as the Engagement Manager at the Canadian Hydrogen Association (CHA), where he is responsible for leading the execution of national outreach strategies aimed at engaging current and prospective members, as well as federal government partners and officials. In this capacity, he strengthens relationships within the Canadian hydrogen ecosystem, manages CHA's partnerships with federal government bodies, and advances the organization's government relations agenda. His work encompasses policy research and analysis, advocacy, stakeholder engagement, and initiatives to raise awareness of hydrogen's role in Canada's clean energy transition.

## Phil Horacek

Director, Low Carbon Transportation, **FortisBC**

Philip Horacek currently serves as Director, Low Carbon Transportation at FortisBC, bringing over 20 years of experience in the hydrogen and alternative fuels industry. He has held numerous senior technical and corporate leadership roles, leading the safety and performance testing of hydrogen components and fuel systems, design and building of hydrogen fueling infrastructure, and deployment of electric vehicle fast-charging infrastructure teams as well as business development and business operations teams.

## Omar Kassem

Chief Executive Officer, **Salish Elements**

Omar Kassem is the Chief Executive officer, chief engineer and primary hydrogen technology expert for Salish Elements and a co-founder. He runs the company's day-to-day operations. He is a registered Professional Engineer with more than seven years of energy industry experience, particularly in plant design, maintenance, and operations.

Omar shapes the company's vision and turns it into reality by developing and executing key initiatives, staying current in the hydrogen industry, securing funding, building strategic partnerships, and setting the overall direction. He also manages the company's engineering services.

## Ron Klopfer

CEO, **Hyfluence**

Ron Klopfer is co-founder and CEO of Hyfluence Systems Corp, a BC-based designer and manufacturer of advanced equipment and infrastructure for hydrogen vehicle refueling. From its manufacturing facility in Burnaby, Hyfluence is currently delivering leading refueling systems to multiple customers and hydrogen projects across North America. Ron is a veteran technology entrepreneur, having co-founded, financed and grown five technology startups over the past 20 years. Ron holds an MBA technology marketing from Queen's University, and a Bachelor of Computer Engineering from the University of B.C.

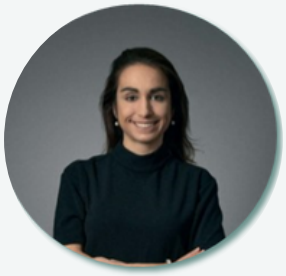
## Cora Moffatt

Research And Development Engineer, **Sea to Sky Energy Solutions**

As Project Lead for the 10MW Brandywine Low Carbon Hydrogen Project, Cora is proud to represent this First Nations majority-owned initiative and is deeply committed to the transition to Net Zero. She holds a Masters Degree in Mechanical Engineering from the University of Glasgow (UK). She has built strong, meaningful relationships with multiple hydrogen off-takers and remains actively engaged with government, regulatory bodies, and project partners. Cora's strength lies in her ability to forge and nurture strategic partnerships—an invaluable asset to the project team. Passionate about creating win-win scenarios, she is dedicated to advancing business objectives by connecting people, building deep and lasting relationships, and fostering a culture of collaboration and trust.

## Leah Michalopoulos

Manager, External Affairs, **Toyota Canada**



Leah Michalopulos brings over 10 years of political, policy and regulatory experience in areas spanning energy and environment, Canada-U.S. relations, critical infrastructure security and trade to her role at Toyota Canada.

Prior to assuming this role, Leah managed government relations, Canada-U.S., and grid security programs at Electricity Canada. Her experience also includes positions in a federal Minister's office and working for a Member of Provincial Parliament. She has a MA in Communications from Johns Hopkins University and a BA in International Relations from the University of Toronto.

## Jasmin Ogilvie

Business Development Coordinator, **Hydra Energy**

Jasmin Ogilvie is a recent graduate in environment and urban sustainability, currently working as a Business Development Coordinator at Hydra Energy. She has experience in sustainable business development and the fashion industry. Jasmin served as the President of the Environment and Urban Sustainability Students' Association and was an Instructor at Evans Lake Forest Education Society. Jasmin earned her Bachelor of Arts in Environment and Urban Sustainability from Toronto Metropolitan University.

## Nicolas Pocard

Vice President Marketing & Strategic Partnerships, **Ballard Power Systems**

Nicolas Pocard has more than 20 years of experience in business development and marketing at the international level. Nicolas Pocard joined the fuel cell industry in 2004 and Ballard Power Systems in 2012. Among his responsibilities, Nicolas looks after corporate market strategy, marketing activities, government relations, and strategic partnerships for Ballard.

Nicolas Pocard has previously served as Vice-Chair and Chair for the Board of the Canadian Hydrogen Association (CHA) and is a current board member. He is also a Board member of the California Hydrogen Business Council (CHBC) and of the Canadian Urban Transit Research & Innovation Consortium (CUTRIC). He also represents Ballard with various Industry Associations and Government forums.

## Todd Romaine

Business Development Coordinator, **Hydra Energy**

Todd Romaine brings over 20 years of relevant work experience to the Canadian Hydrogen Association, serving in senior management roles both domestic and internationally in the oil & gas industry, mining sector, aboriginal organizations, as well as public governments. His responsibilities included the sustainable and responsible development and management of natural resources both as industry and as a regulator. Todd holds professional designations with the Canadian Institute of Planners, the International Right of Way Association and has degrees in International Relations, Leadership, Environmental Planning and Environmental Studies. He recently finished a graduate program in Sustainability Leadership with the University of Cambridge.

## Pierre Poulain

President & Chief Executive Officer, **Powertech Labs**

Pierre Poulain is the President and CEO of Powertech Labs Inc., a subsidiary of BC Hydro, which provides performance testing, engineering studies, Hydrogen technologies and testing, and modeling for the electric utility, clean energy, and industrial sectors. He has held senior positions in the technology, energy, and transportation industries, including at Vard Electro AS, Ultra Maritime, Fleetway (Irving), and MAN Energy Solutions. He is a veteran who served in the Royal Canadian Navy as a Marine and Combat Systems Engineer and Naval Officer. Pierre has a deep understanding of the knowledge-based economy, with a focus on electrification and decarbonization, and is actively involved in industry events. He holds an MBA from Saint Mary's University, a Bachelor of Electrical Engineering from Dalhousie University, and a Marine Engineering Diploma from l'Institut Maritime du Quebec. Pierre is fluent in both French and English and is an active member of the community.

## Gary Schubak

Chief Commercial Officer, **Ekona Power Inc.**

Gary is a Professional Mechanical Engineer with more than 30 years of experience developing and commercializing new clean energy technologies. With deep background in technology innovation, marketing and business development, Gary has helped navigate several products from early prototype to commercial sales.

Gary has extensive background in the Hydrogen and Fuel Cells industry. He previously worked at Ballard Power Systems for 20 years, where he held a variety of positions including Product Manager, Key Account Manager and Director of Global Sales. Presently, Gary serves as the Chief Commercial Officer for Ekona Power. Gary lives and works in Vancouver, BC.

## Leanne Sharpe

Senior Manager, Hydrogen Infrastructure Engineering**, Powertech Labs**

With over 18 years of commitment to innovation in project management and engineering across diverse sectors, I am an experienced leader who is passionate about creating a brighter, cleaner future. My expertise spans hydrogen, clean energy, oil and gas, mechanical & process engineering, and instrumentation & controls design.

## Elise Woolliams

Operations Manager, **Unilia Canada**

With over 20 years of experience in the automotive fuel cell industry, Elise Woolliams brings experience in corporate operations, program management, and engineering design to the hydrogen sector. This includes leading international cross-functional teams to bring fuel cell products from research to series production, meeting stringent engineering, quality, cost, and timing requirements. In her current role as Operations Manager at Unilia (Canada) Fuel Cells Inc., Elise is a driven and personable leader committed to advancing clean energy initiatives.

Scan the QR Code below to learn more about Hydrogen BC

Canadian Hydrogen Association | Association Canadienne de L'hydrogène

Hydrogen British Columbia

# A Vibrant, Influential, and Growing Community

**200+** Members Nationwide

**50+** Years of Advocacy

**180+** Events and Missions

Canadian Hydrogen Association | Association Canadienne de L'hydrogène

# Representing British Columbia Hydrogen

333 Bay St.
#2400 Toronto, ON
M5H 2T6

P: (604) 281-1040
E: info@canadah2.ca
W: www.canadah2.ca