



Government of Canada

Trade Commissioner Service

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Service des délégués commerciaux

Canada

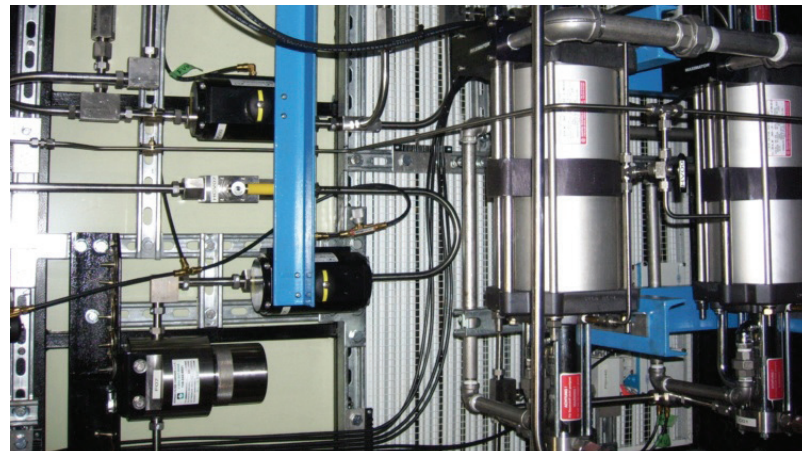
CANADA A GLOBAL LEADER IN HYDROGEN AND FUEL CELL RESEARCH AND ENGINEERING

Canada is home to the best hydrogen and fuel cell scientists and engineers in the world.

Canadian firms are helping companies and industries accelerate their fuel cell development efforts through the provision of specialized research and engineering services. Companies, Governments, research institutes and organisation around the globe rely on Canadian companies for their world leading expertise in hydrogen and fuel cell:

- > Materials research and integration
- > Stack and system design
- > Applications engineering
- > Product development
- > Manufacturing process development

Manage and grow with industry insights and service packages tailored to meet your needs.



SACRÉ-DAVEY ENGINEERING

> www.sacre-davey.com

Sacré-Davey provides engineering and project management services. Hydrogen systems and solutions developed by Sacré-Davey are compact, flexible, and cost effective and include:

- > Purification Systems
- > Compression & Processing Systems
- > Reforming and Electrolysis Systems
- > High Pressure Storage & Fuelling Systems
- > Fuel Cell and ICE Integration
- > and Combined Heat and Power Systems

Sacré-Davey Innovations successfully delivered a mobile hydrogen fuelling station to Air Liquide Canada.

The station stores over 100 kg of gaseous hydrogen at 450 bar (6500 psig) and is capable of filling vehicles to 350 bar (5000 psig) pressure.



Bringing leadership and innovative solutions to the world.

HYDROGEN AND FUEL CELLS

TRADE COMMISSIONER SERVICE (TCS)

EXAMPLES OF INNOVATIVE COMPANIES INCLUDE:



NORAM ENGINEERING AND CONSTRUCTORS > www.noram-eng.com

NORAM is a private multi-disciplined technology company experienced in the design and operation of electrochemical plants with loads between 5 and 200 MW, and specializes in the development, commercialization and supply of electrochemical processes. Expertise includes chemical process engineering, plant modeling, design of chemical and electrical systems, systems integration, supply of prototype and pilot plant systems, and supply of specialized balance-of-plant components including hydrogen generation and delivery systems.

NORAM expertise includes stationary power applications for fuel cells, with an emphasis on regenerative fuel cells (flow batteries) for industrial and utility-scale energy storage. NORAM is also active in reforming technologies for hydrogen production. NORAM supplies proprietary engineering and equipment packages worldwide through its Vancouver office and local fabrication subsidiary.



Canadian Nuclear
Laboratories

Laboratoires Nucléaires
Canadiens

CANADIAN NUCLEAR LABORATORIES > www.cnl.ca

As Canada's premier nuclear science and technology (S&T) organization **Canadian Nuclear Laboratories** (CNL) serves an important public policy role in nuclear matters, providing advice, counsel and service as an agent of the federal government. CNL fosters the development of highly-qualified people for the knowledge economy to come.

Under its Clean, Safe Energy program, CNL, with its collaborators, develops, assesses and facilitates the commercialization of innovative hydrogen and fuel cell technologies utilizing CNL's expertise in heavy water and hydrogen technology and its patented wet-proofed catalyst technology for applications to electrolysis (electrolytic cells) and fuel cells. It also provides the foundation for the production and application of hydrogen as an energy source.

NATIONAL RESEARCH COUNCIL CANADA > www.nrc.ca

The **National Research Council of Canada** (NRC) is Canada's premier applied research organization dedicated to supporting Canada's fuel cell and hydrogen industry. NRC works closely with Canadian universities, government agencies and companies on projects focused on the research, development, demonstration and testing of hydrogen and fuel cell systems.

NRC maintains testing and evaluation facilities including nine hydrogen-ready labs, a membrane electrode assembly facility, a new Hydrogen Environmental Chamber (HEC) and an industrial incubator for early stage companies.

NRC also has the facilities and capabilities to host integrated technology demonstration projects, with a primary objective to address both technical and non-technical barriers to deployment of fuel cell, hydrogen and clean energy technologies.



**MORE FIRMS WITH
RESEARCH AND
ENGINEERING
EXPERTISE:**

- > **Ballard Power Systems**
www.ballard.com
- > **Blue-O Technology Inc**
www.blue-otechnology.com
- > **CCS Global Group Inc.**
www.ccsglobalgroup.com
- > **Cellula Robotics Ltd.**
www.cellula.com
- > **Change Energy Services Inc**
www.changeenergy.ca
- > **Hydrogenics**
hydrogenics.com

- > **NSERC Hydrogen Canada: H₂CAN**
www.h2can.ca
- > **OverDrive Fuel Cell Engineering Inc**
www.overdrivefce.ca
- > **Pathway Industries**
www.pathwayindustries.com
- > **Simulent Consulting Inc**
www.simulent.com
- > **Terrella Energy Systems Ltd**
www.terrellaenergy.com

- > **Zen Clean Energy Solutions Inc**
www.zenenergysolutions.com



**THE CANADIAN HYDROGEN
AND FUEL CELL ASSOCIATION**

For more information about innovative Canadian hydrogen and fuel cells companies please visit > www.chfca.ca

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The Canadian Trade Commissioner Service is a key resource for anyone interested in doing business with Canada. Our global network of trade offices and dedicated officers are available to connect you to Canadian companies and research organizations. For more information, we encourage you to contact one of Canada's Trade Commissioners located in your market. > www.tradecommissioner.gc.ca