

Clean Technology

Nova Scotia, Canada

A leading research and development industry with expertise in energy storage and direct access to a variety of renewables.

Nova Scotia has accessed renewable energy sources for over 100 years – many hydro sites in operation today have been providing renewable energy to Nova Scotians since the early 20th century. From the Bay of Fundy, which pushes more than 160 billion tonnes of water every tide, to some of the highest average wind speeds in Canada, the province is rich with potential for renewable testing and research projects.

Did you know that Nova Scotia is also a leader in battery research? Tesla partnered with Dalhousie University Research Chair, Dr. Jeff Dahn, in 2016 to develop lithium-ion batteries. Battery research and expertise in the province has only grown since then, with multiple active research teams and companies.

**Nova Scotia is a
leader in energy
storage**

Clean Technology in Nova Scotia, Canada

About the Sector

Nova Scotia's access to a variety of renewables and a number of organic materials offers an opportunity for significant R&D activities as well as commercial-scale projects.

Energy Storage

Nova Scotia is quickly becoming a hub for energy storage. The province is home to North America's leading lead-acid battery producer and Canada's only remaining independent battery manufacturer, Surrette Battery.

You can also find Novonix, a company spun out of Dr. Jeff Dahn's lab at Dalhousie University, that specializes in developing battery testing equipment with a strong focus on the use of high precision coulometry for reliable lifetime evaluation of lithium-ion cells.

Bioeconomy

Nova Scotia's bioeconomy is constantly innovating to find novel and sustainable uses for by-products. From cellulosic biomass from forestry residue to shellfish waste, there are strong opportunities for co-location and partnerships to produce value-added bioproducts.

Nova Scotia also has unique expertise in algae bioproducts. The federal NRC research facility, located in Ketch Harbour, is exploring the many potential commercial applications of microalgae such as biofuels, aquaculture feeds, and anti-microbial compounds.

Research and Innovation

Canada's University Capital, Nova Scotia, is home to 10 universities and 13 community college campuses across the province—many of which conduct industry-leading research. Federal and provincial research labs can also be found throughout the province including:

- Perennia Innovation Centre;

- Fundy Ocean Research Centre for Energy (FORCE);
- Centre for Ocean Ventures and Entrepreneurship (COVE);
- Université Sainte-Anne;
- The Verschuren Centre for Sustainability in Energy and the Environment at Cape Breton University.

Business and R&D Incentives

According to KPMG's Competitive Alternatives report, Halifax's competitive edge includes 13%, 20%, and 24% overall operating cost advantages over London, Seattle, and New York, respectively. The province also offers:

- **Research and Development Tax Credits:** up to 50% of qualified Scientific Research & Experimental Development expenditures made in Nova Scotia are eligible as a tax credit.
- **Innovation Rebate Program:** 25% of qualified capital investment expenditures are eligible for a rebate.
- **Accelerated Capital Cost Allowances:** the cost of specified clean energy equipment is eligible for a full tax write-off the year it is put in use in the business, translating to lower taxable income in the first year of operations.
- **Payroll Rebate:** return on a company's eligible gross payroll.



YOU'RE IN GOOD COMPANY

Some of the world's top companies have taken advantage of the unique opportunities in Nova Scotia's clean technology sector.



FOR MORE INFORMATION CONTACT:

Suzanne Fraser

Investment Attraction, Clean Technology

t: +1 902 424 5052 e: sfraser@nsbi.ca m: +1 902 233 7804

LEARN MORE AT:
poweredbyns.com

FOLLOW US ON

