### **BRITISH COLUMBIA CANADA**





## **TECHNOLOGY**

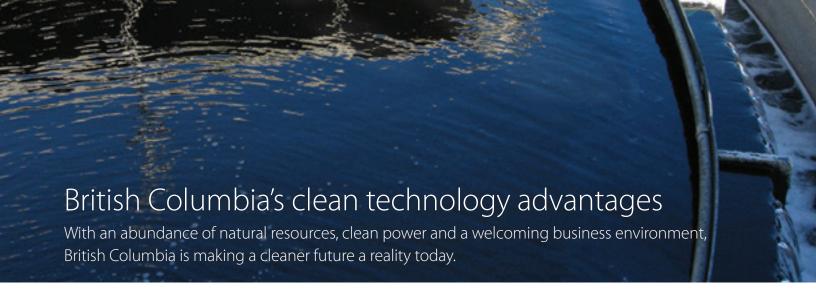
# A leading research and development hub at the forefront of green innovation

British Columbia, Canada, is home to world-class clean technology companies and is a leading centre for scientific innovation. British Columbia also offers a highly skilled workforce, a prime location and targeted incentives.

Join leading clean tech companies, including Ballard Power Systems, Greenlight Innovation, Corvus Energy, Awesense, Quadrogen, Powertech Labs and others on the cutting edge of scientific excellence in renewable energy, clean transportation technology, energy efficiency and waste resource management.

If you want to locate your business in an ideal environment for technology investment and partnership opportunities, British Columbia is the right place to be — it's where innovative technologies are taking off.

COLUMBIA Canada **\*** 



### THRIVING CLEAN TECHNOLOGY CLUSTER

British Columbia has one of the highest tech sector growth rates relative to GDP in Canada, with Vancouver serving as home to approximately 30% of Canadian clean technology companies. Seven of B.C.'s companies are on the 2018 Global Cleantech 100 list, which represents the most innovative and promising ideas in clean tech, and which are best positioned to solve tomorrow's clean tech challenges.

### OUTSTANDING RESEARCH INSTITUTIONS

Take advantage of our 25 world class educational institutions and several centres of excellence supporting green research and technology development.

#### **EXCEPTIONAL TALENT**

B.C.'s large, flexible and educated workforce of 106,000 across the broader tech ecosystem is well represented by young, diverse and energetic talent. In fact, B.C. has a growing number of technology-related graduates.

#### **LOW POWER PRICING**

Over 98% of British Columbia's electricity currently comes from large hydroelectric facilities and other clean, renewable resources, providing clean electricity to support industry developing low carbon products and services at some of North America's most affordable power rates.



#### **BUSINESS INCENTIVES**

British Columbia is a world leader in sciences and technology. Since 1998, universities have been awarded \$1.29 billion for research and innovation infrastructure. Over the past year, the industry has attracted over \$2 billion in investment to the province, all spurred on by national and provincial tax credits.

#### **SUPPORTIVE GOVERNMENT**

- ▶ B.C.'s general corporate income tax rate is only 12%. When combined with the federal rate, businesses pay a combined rate of 27%.
- ▶ B.C. has the lowest provincial personal income taxes in Canada for individuals earning up to \$125,000.
- Employer health care coverage for employees is optional and affordable.
- ▶ The \$100 million dollar BCTech Fund, a venture capital fund-of-funds, invests in emerging technology companies in B.C. and supports the development of a strong venture capital system.
- ▶ The B.C. Innovative Clean Energy Fund (ICE) has partnered with Sustainable Development Technology Canada (SDTC) in a \$40 million partnership on clean energy technology. Two funding agencies one streamlined application process to support the development of pre-commercial clean-energy projects and technologies.
- ▶ B.C. continues to provide provincial sales tax exemptions on certain materials and equipment from alternative energy sources.

Program	Qualifying Entities	Incentive
Canadian Scientific Research and Experimental Development (SR & ED) Tax Credit	Canadian-controlled private corporations Other Canadian corporations	Tax credit of up to 35% of qualified expenses for work carried out in Canada Tax credit of up to 15% of qualified expenses for work carried out in Canada
British Columbia Scientific Research and Experimental Development (SR & ED) Tax Credit	Corporations conducting SR and ED in B.C.	Tax credit of up to 10% of qualified SR and ED expenses





### Industry profile

British Columbia's diverse clean tech sector is a leader in the research and development of innovative new systems and products.

### **HYDROGEN AND FUEL CELL**

Led by Ballard Power Systems, a global innovator in PEM (proton exchange membrane) fuel cell technology, companies in British Columbia are developing hydrogen and fuel cell technology as a clean energy solution in diverse applications, from materials handling and backup power for portable electronics to fuelling infrastructure and transit bus applications. Ballard has designed and shipped close to 150 megawatts of hydrogen fuel cell technology to date.

#### **CLEAN TRANSPORTATION**

British Columbia leads the way in clean transportation technology. The industry's major manufacturers have already invested in and adopted B.C. innovations in plug-in electric, fuel cell and natural gas engines. Westport Innovations engineers the world's most advanced natural gas engines and vehicles, fundamentally changing the way the world travels the roads, rails, and seas and reducing both emissions and fuel costs.

### ENERGY MANAGEMENT AND ENERGY EFFICIENCY

British Columbia is home to innovators in energy efficiency and smart measurement, monitoring and control. For example, Corinex Communications develops and manufactures solutions for smart metering and smart grid infrastructure projects, and Neurio offers industry leading energy monitoring, control technology and sophisticated analytics to manage energy usage at home.

#### **CLEAN AND RENEWABLE ENERGY**

British Columbia's abundant natural resources drive the development, testing and use of clean, renewable energy technology including wind, wave, hydroelectric, solar power, biomass and more. For example, Pinnacle Renewable Energy manufactures pellets that produce renewable energy for some of the largest electrical generating facilities in the U.K., Japan, Italy and other countries for both commercial and residential consumers.



B.C.'s cutting-edge companies turn wastewater and solid waste into pristine drinking water, clean energy, and valuable, marketable materials. Companies like Nexterra Systems, a global leader in energy-from-waste gasification systems, supplies a biomass gasification system for a major U.K. renewable energy power plant. Harvest Power uses discarded organic materials to produce renewable energy and fertilizer products, creating a more sustainable future at the intersection of waste, agriculture and energy. Axine Water Technologies developed a low-cost, chemical-free solution for treating high concentrations of pollutants in industrial wastewater. BI Pure Water specializes in containerized and mobile water treatment plants designed to specific water or waste analyses and budget. Ostara developed game changing technology that harvests nutrients from wastewater and transforms them into a pure, eco-friendly fertilizer that improves nutrient efficiency and reduces the risk of leaching and runoff.

### COMPETITIVE ADVANTAGES OF BRITISH COLUMBIA

- ► Targeted incentives for research and development
- ▶ Highly educated and skilled workforce
- ▶ High quality of life
- ▶ Prime location
- Competitive corporate and personal income taxes
- ▶ Green, low-cost power
- ▶ Excellent public infrastructure



### Centres of Excellence

British Columbia's Green Centres of Excellence bring experts from the public, private and academic sectors together to collaborate on applied research, development and commercialization of new technologies.

Centre of Excellence	Academic Institutions	Focus
Centre for Energy Systems Applications	British Columbia Institute of Technology	Renewable energy technologies (geo-exchange, photovoltaic, and high efficiency lighting) in an integrated systems approach
Centre for Interactive Research on Sustainability	University of British Columbia	Sustainable transportation, clean energy/technology
Energy House	Northern Lights College	Wind turbines, photovoltaic, solar thermal, biomass, geo-exchange
Institute for Integrated Energy Systems	University of Victoria	Renewable energy systems
Institute for Resources, Environment and Sustainability	University of British Columbia	Sustainable resource management and ecology
Pacific Institute for Climate Solutions	University of Victoria, University of British Columbia, Simon Fraser University and University of Northern British Columbia	Low-carbon economy, climate change, sustainable communities, resilient ecosystems
Jim Pattison Centre of Excellence in Sustainable Building Technologies and Renewable Energy Conservation	Okanagan College	Sustainable construction management technology, geothermal, electrical, carpentry, green building design and construction, on-site alternative energy sources, metering and monitoring of green buildings, building envelope construction, life cycle management, HVAC, applied ecology and conservation, human kinetics
Carbon Capture and Conversion Institute	University of British Columbia	A collaborative venture between CMC Research Institutes and BC Research Inc. The facility support researchers and technology developers from academia and industry (particularly Small and Medium Enterprises), in accelerating the development, validation and prototyping of novel carbon capture and conversion technologies.





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All figures are in Canadian dollars.



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