

# ALBERTA CLEAN TECH ECOSYSTEM MAP 2019/2020

August 2019

## MAP SPONSORS



## Funding

### Grant Funding, Tax Credits & Challenge Prizes

**Alberta Economic Development and Trade Tax Credits (AEDT)**  
Capital Investment Tax Credit (CITC) and Investor Tax Credit (AITC).

**Alberta Innovates (AI)**  
Works with the private & public sectors to stimulate innovation, research & entrepreneurship in Alberta. Innovators can benefit from funding programs that focus on Advanced Hydrocarbons, Clean Technology and Environmental Innovation. Support for researchers and entrepreneurs through voucher and cross-sectoral programs are available.

**Alberta Upstream Petroleum Research Funding (AUPRF)**  
Industry sponsored research funding to address high priority environmental and social matters related to oil and gas in Alberta.

**Energy Efficiency Alberta (EEA)**  
Alberta government agency dedicated to saving energy, supporting small scale generation, and developing an energy efficiency services industry.

**Emissions Reduction Alberta (ERA)**  
Invests in innovation to reduce greenhouse gas emissions in Alberta.

**Impact Canada Challenge Hub**  
A hub for the federal government's innovation challenges for solutions to economic, environmental, and social problems.

**Innovative Solutions Canada (ISC)**  
Supports growth of Canada's SME innovators by having federal government act as a first customer for specified needs.

**Natural Gas Innovation Fund (NGIF)**  
Non-dilutive funding of cleantech innovation in the natural gas value chain by leading natural gas producers and distributors.

**Natural Products Canada (NPC)**  
Connects and supports a vibrant ecosystem of expertise, resources, and investment that bolsters commercialization in Canada's natural products industry.

**Scientific Research and Experimental Development Tax Incentive Program (SR&ED)**  
Federal tax incentive program that provides a tax credit for money spent on R&D.

**Sustainable Development Technologies Canada (SDTC)**  
Accelerates the development and deployment of globally competitive clean technology solutions through coaching and funding Canadian entrepreneurs.

### Funding for Wages & Interns

**Alberta Innovates - Industry Associates Program**  
Up to \$112,000 per year for up to two years for a highly trained Commercial or R&D Associate to advance an Alberta small or medium size company towards successful commercialization.

**Alberta Training to Work Programs**  
Reimburses up to 25 weeks of workplace training for new hires who were previously unemployed.

**Career Launcher - grad internship program**  
Up to \$15,000 to hire a Canadian post-secondary grad, under 30 years old, for a 6-12 month internship.

**GreenSTEM - fellowship**  
2-year fellowship for recent grads of STEM master's and PhD programs allowing them to develop technologies with emissions reduction potential.

**MITACS**  
For graduate students / recent grads. Accelerate: \$15,000 for a 4-month research project internship. Elevate: up to 2-year research fellowships. Globalink: funding for research abroad.

**NRC - Industrial Research Assistance Program (NRC - IRAP)**  
R&D and internship funding; 3-6 month or 6-12 month wage subsidy funding for people under 30 years old.

### Loans & Investment

**Alberta Indian Investment Corporation (AIIC)**  
Provides loan and equity financing to Alberta First Nation entrepreneurs.

**Alberta Women Entrepreneurs (AWE)**  
Provides programs and services to women at all stages of business through advising, loans, mentoring, and skills and network development.

**ATB Financial (ATB)**  
Offers financing solutions and access to experts and resources to help Alberta businesses start and grow.

**Business Development Bank of Canada (BDC)**  
The bank for entrepreneurs. Offers financing, venture capital, growth & transition capital and consulting services.

**Futurepreneur**  
Provides low-interest loans, mentoring and expertise for 18-39 year olds to help get their start-ups off the ground.

## Growth

### Prototyping, Testing & Tech Validation

**ACAMP**  
Product development centre for advanced technology provides engineers, tech experts and specialized equipment. Focus on autonomous systems for infrastructure and transportation.

**Alberta Innovates - C-FER Technologies**  
Provides full-scale testing and specialized engineering consulting services from world-class facilities in Edmonton. Advances safety, environmental performance and efficiency in the energy industry.

**Alberta Innovates - Innotech**  
Operates applied research facilities for government and industry clients across Alberta (e.g. the Alberta Canada Carbon Conversion Test Center, which tests technology using real-life flue gas).

**CanmetENERGY - Devon AB Research Centre**  
Dedicated to the development of cleaner fossil fuels and related environmental technologies with a focus on oil sands and heavy oil.

**Carbon Management Canada Research Institutes (CMC-RI)**  
National research network focused on accelerating R&D, training and commercialization of technologies toward zero-carbon emissions fossil energy systems.

**COSIA Environmental Technology Assessment Portal (E-TAP)**  
COSIA's online assessment tool for technologies, practical solutions, and research that can accelerate environmental performance improvement in Canada's oil sands.

**COSIA Water Technology Development Centre**  
A dedicated test facility for new water treatment technologies for the oil sands.

**GreenCentre Canada - CONNECT**  
Ontario based program that provides Canadian SMEs in the bioproducts and clean tech space access to external services to accelerate the development of their products or services.

**NAIT Centre for Sensors & System Integration**  
Helps develop field prototype devices that address sensor-based challenges in resource extraction, agriculture, biomedical, and advanced technology enterprises.

**NAIT Distributed Energy Management Initiative (DEMI)**  
A "plug-and-play" microgrid where energy companies can test and validate technologies under realistic field conditions.

**Olds College Centre for Innovation (OCCI)**  
Hub for research and innovation in the agricultural sector, providing expertise, equipment, unique facilities and funding leverage.

**Olds College Smart Farm**  
A place for innovation, validation, demonstration and scaling of smart connected agriculture technology through industry partnerships.

**SAIT Centre for Energy Research and Clean Unconventional Technology Solutions**  
Scientific expertise and lab facilities for testing and pilot demonstrations for clean tech energy solutions.

**SAIT Green Building Centre**  
Develops and tests environmentally friendly technologies, processes, and systems that will change the way we design & build, educate and train skilled labour.

**Saskatchewan Research Council (SRC)**  
Provides applied research, development and demonstration (RD&D) and technology commercialization.

**U of A Centre for Smart Transportation (CST)**  
Operating within the department of Civil & Environmental Engineering, CST is focused on advancing transportation research and technology development and transfer.

Download the PDF version of the Alberta Clean Tech Ecosystem Map for live links of all listings: [actia.ca](http://actia.ca)



## Accelerators – Space, Mentors, & Collaboration

**Canadian Environmental Technology Advancement Corporation- WEST (CETAC West)**  
Supports SMEs engaged in the development and commercialization of new environmental technologies.

**Creative Destruction Labs-Rockies (CDL)**  
A seed-stage program at UofC for massively scalable, science-based companies; both general technology and energy-specific.

**Energy Innovation to Commercialisation Program (I2CP)**  
Decentralized Energy Canada's accelerator program.

**Foresight**  
Western Canada accelerator for transformative cleantech startups from launch to scale.

**MaRS**  
Toronto-based accelerator for Canadian ventures in the cleantech, fintech, health, and enterprise sectors.

**NAIT - Productivity and Innovation Centre (PIC)**  
State-of-the-art facility providing advanced manufacturing labs, acceleration spaces for small and medium-sized businesses and a dedicated hub for applied research activity.

**Platform Calgary - Telus Incubator & Accelerator**  
Accelerates innovation-driven ventures by providing space, programs, mentorship and capital, with a focus on big data, digital health, IoT and smart agriculture.

**Startup Calgary**  
Calgary-based events and programs for ideation and conception stage entrepreneurs.

**Startup Edmonton**  
Edmonton-based mentorship, programs, coworking space, community events and support for entrepreneurs as they build and grow tech-enabled products.

**TEC Edmonton**  
Provides mentorship, work and lab space, events, programs and industry-specific accelerators to help innovators, entrepreneurs and researchers succeed.

**Tecterra**  
Calgary-based geomatics technology innovation support centre.

**Tundra ACE (Acceleration Centre for Entrepreneurs)**  
Helps Alberta's best and brightest accelerate the commercialization of their near market-ready technologies that solve some of the energy industry's biggest challenges.

**UofC - Innovate Calgary**  
The innovation transfer and business incubator centre for the University of Calgary.

**WaterNEXT**  
Helping innovators develop the next generation of Canadian water technologies and solutions.

**Zone Startup**  
A global network of accelerator programs transforming innovative ideas and products into world-class companies.

## Workspace

**Edison Building**  
Develops a solid business community through cultivating connections and providing spaces that spark creativity in downtown Calgary.

**Platform Calgary - Alastair Ross Technology Centre (ARTC)**  
Offers more than 120,000-square-feet of office and shared space, making it one of Calgary's largest innovation communities.

**Startup Edmonton**  
Co-working space for entrepreneurs, creators, designers and developers in downtown Edmonton.

**Work Nicer Coworking**  
Alberta's largest coworking community with outposts in Calgary and Edmonton.

# Connections

## Ecosystem Advisors & Hubs

- Alberta Innovates - Technology Development Advisors (TDAs)**  
Experienced business advisors based at 8 locations around the province to provide business coaching, connections, and support for AI funding programs.
- Clean Growth Hub**  
One window entry into Federal government help for clean technology projects: find and understand what government programs and services may be right for you.
- NRC IRAP Industrial Technology Advisors**  
Provide advice, connections, and funding to help businesses increase their innovation capacity and take ideas to market.
- JWN Energy**  
Your source for energy news, data, research reports and event information—updated daily.

## Networking

- Alberta Council of Technologies (ABCTech)**  
A point of contact and communication for AB's technology leaders developing alliances for emerging industries.
- BioAlberta**  
Promotes Alberta's bio & life sciences industry and the products and services of member companies.
- Canada's Oil Sands Innovation Alliance (COSIA)**  
Accelerating the pace of improvement in environmental performance in Canada's oil sands through collaborative action and innovation.
- Canadian Geothermal Energy Association (CANGEA)**  
Accelerates Canadian exploration & production of geothermal resources.
- Clean Resources Innovation Network (CRIN)**  
Accelerates ground-breaking solutions by establishing industry priorities and connecting innovators and resources.
- Decentralized Energy Canada (DEC)**  
Calgary-based national industry association for the decentralised energy sector.
- Environmental Services Association of Alberta (ESAA)**  
One of Canada's leading environmental industry organizations.
- nanoCluster Alberta**  
Advocates, develops and nurtures a cluster of companies operating in the nano and micro technology fields within Alberta.
- Petroleum Technology Alliance of Canada (PTAC)**  
Facilitates collaborative R&D and technology development, and partners with industry stakeholders to transform challenges into opportunities.
- Rainforest AB**  
An informal organization of people working together to improve Alberta's innovation ecosystem.
- SHEInnovates Alberta**  
Networking, mentorship and support for female entrepreneurs; Alberta chapter of UN program.
- Technology Alberta**  
A group of people who share a passion for Alberta and its place as a global leader in the advanced technology sector.
- University of Alberta eHub**  
Offers resources, networking opportunities, and funding.

## International Opportunities and Funding

- Alberta Innovates Global Partnerships**  
Support to access funding to develop innovative commercialization projects with a partner in China or Mexico; focus on clean tech.
- Calgary Trade Accelerator Program**  
Offers knowledge, resources and coaching to scale up, develop and execute an export plan. Hosted by Calgary Economic Development.
- Canadian International Innovation Program (CIIP)**  
Supports collaborative industrial research and development projects with high potential for commercialization between Canada and Brazil, China, India, Israel, and South Korea.
- Canadian Trade Commissioner Service (TCS)**  
Federal department that helps companies navigate international markets, and provides funding and support programs for exporters, including access to the global Clean Tech Accelerator program.
- Canadian Technology Accelerator Program**  
A TCS program that opens opportunities in foreign markets through mentoring, workspace in foreign markets and introductions to potential partners, investors and customers.
- Export Development Canada (EDC)**  
Works with Canadian companies and their banks to help reduce the financial risks associated with selling goods or services outside of Canada.
- German-Canadian Centre for Innovation and Research (GCCIR)**  
Offers up to \$250,000 for commercialization projects with Canadian + European partners; up to \$3,000 for trade missions and travel.
- Prairie Biosciences Canada (PBC)**  
Collaboration of Biotech Industry associations dedicated to catalyzing the growth of the clean biotech sector in the Prairies through travel and training subsidies.

## Online Directories

- Innovation Canada Digital Platform**  
Tailored list of everything that the Federal government can do for your business.  
[sic.gc.ca/app/scr/innovation?lang=eng](http://sic.gc.ca/app/scr/innovation?lang=eng)
- Connectica**  
Alberta's web portal connecting innovators to funding, programs, services and more.  
[connectica.ca/i3/](http://connectica.ca/i3/)
- Research Facility Navigator**  
Online directory of research facilities in universities, colleges and hospitals across Canada.  
[navigator.innovation.ca](http://navigator.innovation.ca)
- StartAlberta**  
Portal with information on innovator companies, investors, jobs, news and events.  
[startalberta.com](http://startalberta.com)
- Strategic Timelines**  
Advice and details on over 100 innovation support programs across Canada, updated annually.  
[strategictimelines.com](http://strategictimelines.com)

ACTia is the only multi-stakeholder, province-wide and industry-focused group working to support Albertans developing clean technology.

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## Venture Capital

<b>Accelerate Fund</b> <a href="http://acceleratefund.ca">acceleratefund.ca</a>	<b>ARC Financial</b> <a href="http://arcfinancial.com">arcfinancial.com</a>
<b>Arctern Ventures</b> <a href="http://arcternventures.com">arcternventures.com</a>	<b>AVAC Group</b> <a href="http://avacgrp.com">avacgrp.com</a>
<b>Ayrshire</b> <a href="http://ayrshire.ca">ayrshire.ca</a>	<b>Builders</b> <a href="http://builders.vc">builders.vc</a>
<b>Chrysalix VC</b> <a href="http://chrysalix.com">chrysalix.com</a>	<b>Cycle Capital</b> <a href="http://cyclecapital.com">cyclecapital.com</a>
<b>EnerTech Capital</b> <a href="http://enertechcapital.com">enertechcapital.com</a>	<b>EVOK</b> <a href="http://evokinnovations.com">evokinnovations.com</a>
<b>Intergen Fund</b> <a href="http://intergencanada.com">intergencanada.com</a>	<b>McRock Capital</b> <a href="http://mrockcapital.com">mrockcapital.com</a>
<b>Pyfera</b> <a href="http://pyferacapital.com">pyferacapital.com</a>	<b>Sprout Fund</b> <a href="http://sproutfund.ca">sproutfund.ca</a>

## Key Events

<b>January</b>	<b>Global Cleantech Forum (SFO)</b> <a href="http://cleantech.com/events/upcoming-events">cleantech.com/events/upcoming-events</a>
<b>February</b>	<b>ConvergX (YYC)</b> <a href="http://convergx2019.wp.guideloom.com/conference-summary">convergx2019.wp.guideloom.com/conference-summary</a> <b>Propel Energy Tech Forum (YYC)</b> <a href="http://propelenergytech.com">propelenergytech.com</a> <b>Globe Forum (YVR)</b> <a href="http://globeseries.com">globeseries.com</a>
<b>March</b>	<b>Canadian Financing Forum (YVR)</b> <a href="http://financingforum.com">financingforum.com</a>
<b>April</b>	<b>AccelerateAB (YYC)</b> <a href="http://accelerateab.com">accelerateab.com</a>
<b>June</b>	<b>Inventures (YYC)</b> <a href="http://albertainnovates.ca">albertainnovates.ca</a> <b>Global Petroleum Show (YYC)</b> <a href="http://globalpetroleumshow.com">globalpetroleumshow.com</a> <b>Collision (YYZ)</b> <a href="http://collisionconf.com">collisionconf.com</a>
<b>July</b>	<b>New York Venture Summit</b> <a href="http://youngstartup.com">youngstartup.com</a>
<b>September</b>	<b>Energy Disruptors (YYC)</b> <a href="http://energydisruptors.com">energydisruptors.com</a> <b>WEFTEC (ORD)</b> <a href="http://weftec.org">weftec.org</a>
<b>October</b>	<b>ERA Spark (YEG)</b> <a href="http://eralberta.ca">eralberta.ca</a> <b>Banff Venture Forum, Banff</b> <a href="http://banffventureforum.com">banffventureforum.com</a> <b>RemTech, Banff</b> <a href="http://esaa.org">esaa.org</a>
<b>November</b>	<b>Decentralized Energy Forum, Banff</b> <a href="http://decentralisedforum.com">decentralisedforum.com</a>

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We welcome comments & corrections to take into account for the next update. Please send to: [map@actia.ca](mailto:map@actia.ca).

## ACTIA MEMBERS

