



ONE STEP AHEAD OF THE NEXT BIG THING

ACCELERATING INNOVATION. TRANSFORMING BUSINESS.

InnoTech Alberta is Alberta's leading research and technology organization providing innovative solutions to global challenges facing industry, business and the public sector.

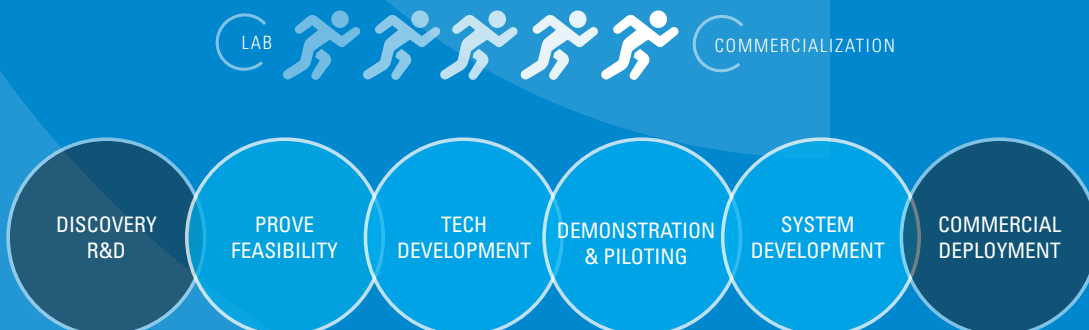
With over 100 years of experience, our world-class expertise and industrial-scale research facilities transform technologies into value-generating solutions. We are your innovation partner to help your business increase profitability, optimize processes and create new market opportunities.

Since 1921, we've been the heart of Alberta's innovation engine as Canada's premier applied research organization. From generating new ideas to testing and commercialization, we work with business and industry partners to find sustainable solutions, enhance processes and transition valuable technology and products into market solutions.

Through our world-class researchers, leading-edge facilities, and broad range of expertise, we have the capacity to solve the challenges facing our partners and clients face.

Driving Technology Commercialization and Use

InnoTech Alberta de-risks technology development from proof of concept to pilot stage testing for the successful use and commercialization of technology. Our clients see an average advancement of 1.3 Technology Readiness Levels through our support.



OUR FOCUS SECTORS



ENERGY

Partnering with Alberta's oil and gas industry in energy research, energy transition and sustainability opportunities.



BIO-INDUSTRIAL

Utilizing the power of biology to improve industrial and consumer products.



ENVIRONMENT

Assisting industry and government in effective monitoring, management, and protection of natural resources and wildlife.



MONITORING, ANALYTICS AND INFORMATICS

Applying measurement and data sciences to support industrial innovation and environmental stewardship.

BREADTH & DEPTH OF EXPERTISE



TECHNOLOGY RESEARCH, DEVELOPMENT & DEPLOYMENT

Access to diversified range of scientific, engineering, and technological research expertise and experience.



DE-RISKING & PILOT DEMONSTRATION FACILITIES

Industrial-scale research infrastructure, equipment, and demonstration facilities built to support and de-risk technological initiatives.



ANALYTICAL, TESTING & MONITORING

Dedicated in-house testing and monitoring capacity and expertise with data analytics, sharing, standardization/informatics, and interoperability services.



INNOVATION & ADVANCED TECHNOLOGIES

Focus on cross-sectoral, applied, advanced technologies including industrial IoT, digital life cycle support and sandbox services.

YES. WE DO THAT.



OUR GROWTH AREAS



CARBON CAPTURE, UTILIZATION AND STORAGE

Demonstrating and de-risking CO₂ capture, conversion, utilization and storage technologies to overcome barriers for industrial adoption and accelerate and reduce cost of commercial deployment.



HYDROGEN TECHNOLOGIES

Enabling hydrogen technology adoption across the entire hydrogen value chain and including supporting technology developments to meet global net-zero targets.



INNOVATIVE OIL SANDS TECHNOLOGIES

Accelerating development of innovative technologies and processes to address challenges faced by oil sands producers as they adapt to constantly evolving market, socio-economic and environmental conditions.



BITUMEN BEYOND COMBUSTION

Developing new products and uses for commercial asphaltene-based carbon fibre.



ENERGY ASSET DECOMMISSIONING AND REUSE

Accelerating and reducing the expenses for decommissioning or potentially reusing energy assets including retired oil or gas well sites and facilities.



ADVANCED MANUFACTURING AND MATERIALS

Advancing innovative design, processing technologies and methodologies, along with novel materials to enable improved sustainability, competitiveness, and economic impact in the manufacturing sector.



HEMP AND CANNABIS

Supports the emerging hemp and cannabis industries by advancing technologies from “seed to final product” with a key focus on hemp and cannabis fibre, extractables, food, and animal feed.



APPLIED DATA SCIENCE

The application of specialized instrumentation, data collection and analysis to enable process optimization leading to significant impacts (productivity, competitiveness and profitability) in key sectors.



SMART AGRICULTURE

The use of digital technologies and systems (internet of things, sensors, robots, and artificial intelligence) in an agricultural context with the goal of increasing the quality and quantity of crops produced while increasing efficiency and productivity.



CLEAN TECHNOLOGIES

Supporting proof of concept, validation and commercialization of processes, products and services to enhance energy efficiency, resource sustainability and environmental sustainability.

FOR A CENTURY, INNOTECH ALBERTA HAS BEEN CANADA'S PREMIERE APPLIED RESEARCH ORGANIZATION, AND THE HEART OF ALBERTA'S INNOVATION ENGINE.

Our Impact

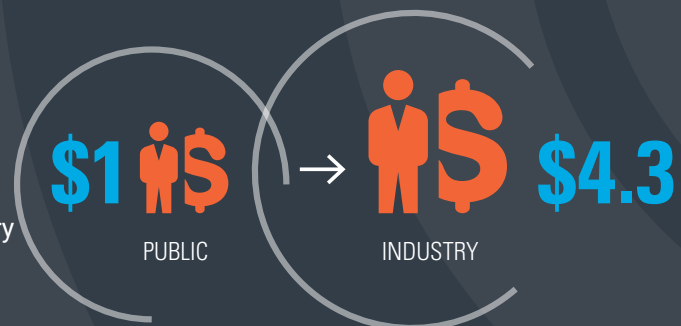
- > In 2020–21, InnoTech Alberta's R&D activities resulted in \$810 M economic impact to Alberta's economy.
- > Our Impacts were enabled by \$17.4 M in Government of Alberta investment (Core Grant plus accommodations) and client revenue of \$29.2 M.
- > Innovation in the Alberta Research and Development sector by 2023: \$2.3 Billion.



\$818 M

Return on Investment

- > Core public investment stimulates **\$4.3** times investment from private and industry partners.



Client Satisfaction WHAT OUR TOP 100 CLIENTS SAY

90% Met their applied R&D needs & created value

90% Came for our technical expertise & experience

88% We are client focused & collaborative

86% Have unique facilities & equipment

84% Are a neutral & trusted advisor

Jobs Created

- > 311 jobs created and maintained in FY 2020–21
- > 95% in Alberta
- > 3,985 total jobs since FY 2012



3,985

JOBS SINCE FY 2012

InnoTech Consortia

- > InnoTech brings together industry, government, and stakeholders to solve shared challenges and bring forward collaborative solutions.

36

LEVERAGED
INDUSTRY
CONSORTIA



19

JOINT
INDUSTRY
PARTNERSHIPS



Technology Readiness Levels

- > TRL is a measure of technology advancement from discovery R&D to commercial deployment

1.3 AVERAGE TRL ADVANCEMENT



COMMERCIALIZATION

InnoTech by the Numbers

- > Over **1 million sq. ft.** of research and lab space.
- > Over **600 acres** of farmland for research and testing.
- > **\$118 million** in innovation infrastructure.

1M
+ SQ FT

221

TEAM MEMBERS
125 PhDs & MASTERS

Our Experts

- > **221 team members** with over **125 Masters and PhDs** with industry and sector expertise in scientific, engineering and technological R&D.
- > Lifetime patents: **426**
- > Active patents: **84**
- > **First patent** was issued to Karl Clark in **1929** for Bituminous Sand Processing.



84

ACTIVE PATENTS



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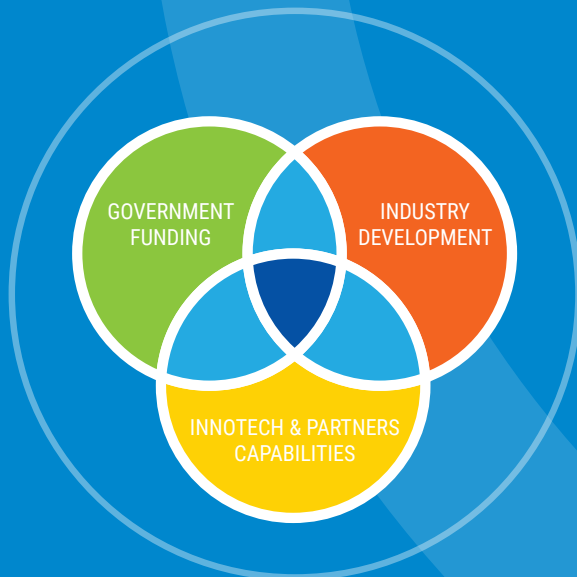
PARTNERING FOR SUCCESS

INNOTECH ALBERTA IS SUBSIDIARY OF ALBERTA INNOVATES, A CROWN CORPORATION FOCUSED ON SUPPORTING THE INNOVATION ECOSYSTEM.

InnoTech bridges the gap between early stage, publicly funded research to innovation in business and industry. We are well positioned as a neutral, third-party provider to remove barriers to technology advancement where others within Alberta's innovation system simply cannot, will not, or should not do such work.

To solve complex challenges, InnoTech takes a collaborative approach to innovation, bringing together industry, government, and stakeholders. With over 55 active partnerships and consortia, we are leaders in developing large-scale solutions to the most challenging industrial and global challenges.

STRATEGIC PARTNERSHIPS



COLLABORATIVE BENEFITS

- > Support innovation from proof of concept to scale-up and commercialization
- > Develop solutions at industry-scale
- > Leverage expertise to provide efficient and cost-effective solutions
- > Provide full service solutions

INNOVATION IMPACTS

- > Shorter timelines to scale and commercialization
- > Leverage research and innovation investment
- > Increase revenue through technology development and industrial deployment
- > New approaches to sustainability



WHY WORK WITH US?

INNOTECH ALBERTA IS A SUBSIDIARY OF ALBERTA INNOVATES, A CROWN CORPORATION FOCUSED ON SUPPORTING THE INNOVATION ECOSYSTEM IN THE PROVINCE. INNOTECH BRIDGES THE GAP BETWEEN EARLY STAGE, PUBLICLY FUNDED RESEARCH TO INNOVATION IN BUSINESS AND INDUSTRY.

- > World-class facilities and expertise
- > Testing and piloting at industrial scale
- > Neutrality as a public, unbiased partner



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 **InnoTech**
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A SUBSIDIARY OF ALBERTA INNOVATES