E-Scan Technology Report

This report provides a scan of organizations that are involved in research, development or commercialization of new agricultural technologies [best practices and best in class (world class) technologies] that may be used in the Alberta grain-based agri-food and animal feed businesses to improve productivity, profitability and competitive positioning in the marketplace.





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AGRICULTURAL MANUFACTURERS OF CANADA (AMC)

Organization	Description and Contact
Agricultural Manufacturers of Canada (AMC)	Membership based organization –applies to any Canadian corporation, firm, partnership or individual who manufacturers agricultural equipment or manufactures products used in agricultural equipment.
	The agricultural manufacturing industry has progressively developed as an entity separate from that of commercial or industrial manufacturing. Central to this evolution was the need to develop innovative agricultural machinery capable of meeting the challenges of the Canadian climate. This drive for innovation was critical to farmers who struggled with foreign equipment designed for smaller farms and less arid conditions.
	The agricultural manufacturing industry has been inventive, imaginative and has blossomed. The industry now contributes approximately \$5.63 billion dollars in sales to the Canadian economy.
	Product & Services Guide
	Contact: Office: 306-522-2710 Email: amc@a-m-c.ca
	AMC - Agricultural Manufacturers of Canada Evraz Place, Stockman's Arena P.O. Box 636, Station Main Regina, SK S4P 3A3
	http://www.a-m-c.ca/about.shtm
Partners	AMC - Agricultural Manufacturers of Canada Membership funding; Affiliate and Associate membership available; AMC Manitoba Safety Program; SASM - Safety Association of Saskatchewan Manufacturers
Keyword tags	Agricultural Equipment Manufacturers; Crop Production; Feed Processing; Manufacturers

AGRICULTURAL TECHNOLOGY CENTRE

Organization	Description and Contact
Agricultural Technology Centre	The Centre is mandated to conduct engineering research and technology development to support a sustainable agriculture industry in Alberta. A close working relationship with PAMI is maintained through a special memorandum of agreement.
	This team of engineers and technologists specialize in producing information based on research, development and evaluation for agricultural machinery and technology. The Agricultural Technology Centre (AgTech Centre) provides expertise in the areas of:
	 Research and Extension Investigate new cropping strategies and equipment Development State-of-the-art test facilities and the latest in engineering expertise
	 Facilities and Services Evaluation Latest farm equipment and technology used in the agriculture industry Information and technology transfer
	 Presentations, demonstration days and sponsored clinics in specialized topic areas AgTech Centre Innovator (e-newsletter)
	Contact: Rick Atkins, M.Sc. P.Eng., Manager Branch Head, Technology and Innovation Office: 403-329-1212 Email: rick.atkins@gov.ab.ca
	AgTech Centre 3000 College Drive Lethbridge, Alberta, T1K 1L6
	www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/eng3096
Partners	Alberta Government; private industry
Keyword tags	Computer-Aided Drafting & Design; Cropping Strategies And Equipment; Facilities And Services; Farm Equipment; Demonstration Days; Data Acquisition & Analysis Systems; Electronic Design & Analysis; Evaluation; Fabrication & Shop Facilities; Field Simulation Equipment; Particle Measurement Systems; Plot Equipment; Power Measurement; Seeding Equipment & Accessories; Shank Trip Mechanism; Soil Bin Test Facility; Sprayer Equipment & Accessories; Technology Transfer; Test Facilities; Tillage Equipment & Accessories; Tractor Test Facilities; Weigh Scales; Wind Tunnel Test Facility; Ventilation & Aeration Fan Testing

AGRICULTURE AND AGRI-FOOD CANADA (AAFC)

Organization	Description and Contact
Organization Agriculture and Agri-Food Canada (AAFC)	Description and Contact AAFC has a variety of technologies and intellectual property available for commercialization. Some licensing opportunities are competitive and time-sensitive. We use the Request for Proposals process to identify technologies that are available for a specific time only. Terms may include commercial exclusivity. If a license is not executed from the Request for Proposals, the technology may continue to be available as a generally available technology. Technologies may also be made available on a non-exclusive basis; such licensing opportunities are included with generally available technologies. Agriculture and Agri-Food Canada is licensed to post its latest technologies on Flintbox®, an online platform for marketing and licensing the outcomes of research. Most of the technologies listed below are described in greater detail on the Flintbox® page. • Technology Transfer and Licensing • Licensing Opportunities Technologies are grouped below according to area of interest and include the following categories: • Bioproducts and Bioprocesses (Biotechnology) • Crop and Livestock Production • Environmental Technologies • Food and Non-Food Products and Processes • Release of Corn Inbred Lines Contact:
	Office of Intellectual Property and Commercialization Office: 1-613-773-2600
	Email: oipc-bpic@agr.gc.ca
	www.agr.gc.ca
Partners	Agriculture and Agri-Food Canada's Research Branch in partnership with industry
Keyword tags	Bioproducts and Bioprocesses; Biotechnology; Crop and Livestock Production; Environmental Technologies; Food and Non-Food Products and Processes

AGRI-TEC CANADA INC. / AGRI-TEC INTERNATIONAL INC

Organization	Description and Contact
Agri-Tec Canada Inc. / Agri-Tec International Inc.	Agri-Tec Canada Inc. is a unique marketing consortium of Western Canadian companies providing a single source for grain handling and storage expertise and technology. Located in Winnipeg, Manitoba, the heart of the Canadian grain industry, Agri-Tec provides complete storage and processing solutions for grain handling and food processing customers around the world.
	Agri-Tec's designs, technical capabilities and equipment specifications are derived from many years of experience working in the demanding conditions found across Canada's prairie landscape. Agri-Tec's strength is its ability to find innovative solutions to the wide range of geographic, climactic or otherwise unique situations faced by international customers.
	The Agri-Tec companies have played a pivotal role in this redevelopment with over 80 newly built grain handling, storage and processing facilities and over 115 upgrades to existing grain elevators completed in Western Canada in the last eight years.
	Contact: Office: 204-287-2311 E-Mail: info@agri-tec.com
	Agri-Tec International Inc. PO Box 367 RPO Corydon Winnipeg, MB R3M 3V3
	www.agri-tec.com/Agri-TecBrochure.pdf www.agri-tec.com
Partners	Consortium of Western Canadian companies involved in grain handling, and storage expertise and technology
Keyword tags	Canadian Grain Handling, Storage And Processing Technology And Expertise

ALBERTA INNOVATES TECHNOLOGY FUTURES

Organization	Description and Contact
Alberta Innovates Technology Futures	Bioresource Technologies supports research and innovation growing prosperity in Alberta's agriculture, food and forestry sectors. The Plant Biotechnology and Genomics program develops and deploys biotechnology and genomics based technologies that add value to Alberta's crop and environmental industries.
	Tech Futures helps technical industries find solutions, develop products and move technologies to market. It's building on Alberta's already established advantage in platform technologies - like nanotechnology, information communications technologies, and genomics - to enhance the technical capacity within Alberta's high-tech companies. It's facilitating access to the strengths of key partners that help support commercialization and grow new ventures. It's investing in and attracting research and entrepreneurial talent who can support these priorities.
	 <u>Bioresource Technologies</u> - From traits to seeds to final products. <u>Success Stories</u>
	Contact Information
	www.albertatechfutures.ca www.albertatechfutures.ca/bioproducts.aspx
Partners	Tech Futures is funded by the Government of Alberta, but operates at arm's length from the government. Managed by an independent Board of Directors which helps guide internal Senior Leadership.
Keyword tags	Biotechnology And Genomics; Crop Production; Environmental Studies; Food And Feedstock Productivity; Plant Breeding; Productivity; Quality

AVAC LTD. – INVESTING IN ALBERTA TECHNOLOGY

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Organization	Description and Contact		
AVAC Ltd Investing in Alberta Technology	AVAC Ltd. is an Alberta-based investment company investing in promising early-stage commercial ventures in value-added agri-business, information and communications technologies, life sciences, and other industrial technology sectors. AVAC also manages an active early-stage venture capital fund-of-funds investment pool, and the new Accelerate Angel co-investment Fund. AVAC's mandate is to help bridge the critical investment gap that exists between innovative ideas and commercial business success.		
	Investments have supported a number of companies developing innovative solutions in agriculture industries including: Agri- Food Processing, Agricultural Bioproducts, New & Enhanced Foods, Nutraceuticals & Functional Foods, Nanotechnology, Agribusiness, Advanced Materials, and Intelligent & Industrial Software.		
	 AVAC Portfolio Companies Accelerate Angel co-investment Fund The Accelerate Fund is an early stage, Angel co-investment fund available to Alberta technology companies 		
	Contact:		
	Edmonton Location		
	Office: 780-485-2411		
	Email: avacinfo@avacltd.com		
	Edmonton Research Park		
	213 Advanced Technology Centre		
	9650 - 20 Ave NW		
	Edmonton, Alberta T6N 1G1		
	http://avacltd.com		
Partners	AVAC, private technology companies		
Keyword tags	Advanced Materials; Agricultural Bioproducts; Agri-Food Processing; Intelligent & Industrial Software; New & Enhanced		
	Foods; Nutraceuticals & Functional Foods; Nanotechnology; Agribusiness		

FOOD PROCESSING DEVELOPMENT CENTRE (LEDUC)

Organization	Description and Contact
Food Processing Development Centre (Leduc)	The Food Processing Development Centre is a modern, fully equipped pilot plant and product development laboratory facility. It is staffed with experienced food scientists, engineers and technologists. Centre services are designed to strengthen and expand the capability of Alberta's food processors to meet the challenges of the marketplace through application of new technology and the development of new or improved products and processes.
	The Food Processing Development Centre is one of the Food Processing Divisions of Alberta Agriculture and Rural Development. Each of its four units is uniquely situated to provide research and development facilities for agri-food processing companies, or those interested in non-food uses for agricultural products.
	 Agrivalue Processing Business Incubator Food Science and Technology Centre Sensory Evaluation Program
	Contact: Ken Gossen Executive Director, Food Processing Division Office: 780 980-4860 Email: ken.gossen@gov.ab.ca
	Food Processing Development Centre 6309 - 45 Street Leduc, Alberta T9E 7C5 www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/fpdc5012
Partners	Alberta Government; Agri-Food Processing Companies
Keyword tags	Business Incubator; Concept Analysis And Development; Equipment; Food Scientists; Innovation; Interim Processing And Product Packaging; Laboratory And Pilot Plant Product Development; Processing; Product Development; Product Packaging; Prototype Design And Demonstration; Quality Control/Quality Assurance Specifications; Regulatory Requirements And Labeling Assistance; Sensory Evaluation; Technical Assistance; Technical Consultations (Engineer)

INNOVATION INSIGHTS

Organization	Description and Contact	
Innovation Insights	with practical demonstrations of manufacturing best practices objective is to enhance the innovative and productive capability	
	Canadian Manufacturers & Exporters (CME) is Canada's larg The National Research Council-Industrial Research Assistance assistance program for small and medium-sized enterprises (research and training programs.	ce Program (NRC-IRAP) is Canada's premier innovation
	 CME Best Practices Innovation Insights (shares information on new and existing manufacturers who are leading the way in innovation awareness and productivity improvements. 	
	Contact:	Contact:
	Jeff Brownlee, Vice President	Aquatic and Crop Resource Development
	Public Affairs & Partnerships / Publisher, 20/20, CME	Office: 902-566-7403
	Direct: 613-238-8888 ext. 4233 Office: 1-800-268-9684	Email: Lise.Lafontaine@nrc-cnrc.gc.ca
	Email: jeff.brownlee@cme-mec.ca	1200 Montreal Road
		Ottawa, Ontario K1A 0R6
	6725 Airport Road, Suite 200	
	Mississauga ON L4V 1V2	www.nrc-cnrc.gc.ca/eng/irap
	www.cme-mec.ca	
Partners	Canadian Manufacturers & Exporters (CME); the National Re	search Council - Industrial Research Assistance Program
Marriage I to see	(NRC-IRAP); and private industry	the a Tank wales w
Keyword tags	Business Opportunities; Innovation; Manufacturing Best Practices, Technology	

MARS – BUILDING CANADA'S NEXT GENERATION OF GROWTH COMPANIES

Organization	Description and Contact
MaRS – Building Canada's Next Generation of Growth Companies	MaRS was designed to be home to a diverse group of organizations across the innovation spectrum. Everything you need is at hand. And new connections happen every day. Tenants include: Research laboratories; Lab and office incubator facilities; Small, medium and established global companies; Venture capital; Community networking organizations; and Professional service firms. Examples include:
	Agri-Technology Commercialization Centre The Agri-Technology Commercialization Centre is a single point of contact for entrepreneurs, researchers, and companies (early-stage to multi-nationals) who are growing businesses in the cutting edge fields of agriculture and biotechnology. The Centre has specialized industry knowledge and market expertise that can help entrepreneurs find capital and increase their profitability. As a collective, the centre can provide agritechnology entrepreneurs with a cross-section of expertise, including: technology transfer, marketing, sales, financing, and legal.
	Agri-Neo Agri-Neo develops low-risk, sustainable chemical products that control diseases in agriculture. At our core is a fundamental belief that innovative products can be both highly effective and have a positive impact on the environment. This principle drives our team to create solutions that replace conventional agricultural products like pesticides, fertilizers, and disinfectants. By doing so, we believe we can make agriculture more productive and more sustainable, resulting in enough clean and safe food to feed us all, and future generations to come.
	Mars Tenant Directory
	Contact: Office: 416-673-8100 Email: marsdiscoverydistrict@marsdd.com
	MaRS Discovery District 101 College St., Toronto ON M5G 1L7
	www.marsdd.com
Partners	Public and private sector with extensive network across industries and around the world
Keyword tags	Agri-technology; Biotechnology; Chemical; Crop Production; Early Stage; Innovation; Innovative Products; Technology Transfer; Sustainable Agriculture

MANITOBA ENTREPRENEURSHIP, TRAINING AND TRADE

Organization	Description and Contact
<u>Manitoba</u>	A web-based guide to Manitoba's capabilities in manufacturing, grain-based technologies and industry support services.
Entrepreneurship, Training and Trade	Advanced Manufacturing & Grain Handling Buyers Guide
	Contact:
	Mr. Bill Teerhuis, Trade Specialist
	Manitoba Trade & Investment, a division of Manitoba Entrepreneurship, Training and Trade
	Office: 204-945-2428
	E-mail: bill.teerhuis@gov.mb.ca
	1100 - 259 Portage Avenue
	Winnipeg, MB R3B 3P4
	www.manitoba-canada.com
Partners	Manitoba Entrepreneurship, Training and Trade; Agricultural and grain based companies
Keyword tags	Agribusiness Manufacturing and Technology; Agricultural Equipment & Machinery; Grain Handling, Storage & Processing; Original Equipment Manufacturers (Oems); Services & Industry Support;; Dryland Farming Technology

PAMI (FORMERLY, PRAIRIE AGRICULTURAL MACHINERY INSTITUTE)

Organization	Description and Contact
PAMI	PAMI focuses on innovative solutions for Agriculture and Beyond by enhancing sustainability and profitability in agriculture and other sectors through research, innovation, adaptation and knowledge transfer.
	Partnering with PAMI provides many benefits for your process or project: conceptualization, research, design, innovation, adaptation, testing and knowledge transfer to enhance sustainability and profitability in agriculture and other industry sectors Pursue initiatives that evaluate the economics of new technologies, explore renewable-energy solutions and bioresources, discover environmental technologies, reinforce organizational knowledge of agricultural machinery, and cultivate technology innovation.
	An evolution from the Prairie Agricultural Machinery Institute – PAMI – was established in 1975 with operations in Humboldt, Saskatchewan; Portage la Prairie, Manitoba; and Lethbridge, Alberta following recommendations of a federal Royal Commission on Farm Machinery in 1971 to create a central agency for testing and evaluating farm machinery in Canada. Its purpose was to provide a unique resource to both prairie farmers and agricultural machinery manufacturers. The Province of Alberta's Agricultural Technology Centre (ATC) maintains a close working relationship with PAMI through a special memorandum of agreement.
	Contact: Toll Free: 1-800-567-7264 Email: humboldt@pami.ca
	Head Office & Western Beef Box 1150, 2215 – 8th Avenue (Highway 5 West) Humboldt, SK S0K 2A0
	http://pami.ca
Partners	Funded by the Saskatchewan Ministry of Agriculture and the Manitoba Ministry of Agriculture, Food and Rural Initiatives; private sector funding.
Keyword tags	Agricultural Development Services, Agricultural Research Services; Applied Agricultural Services; Bioresources; Industry and Resources; Research and Development; Western Beef Development Centre

STATISTICS CANADA - CROP CONDITION ASSESSMENT PROGRAM (CCAP)

Organization	Description and Contact
Organization Statistics Canada- CCAP	Description and Contact The Crop Condition Assessment Program (CCAP) is developed and maintained by Statistics Canada. The CCAP is an interactive product that uses low (AVHRR – 1 kilometre resolution) and moderate resolution (MODIS – 250 meter resolution)), digital satellite data during the growing season to monitor the changing vegetation conditions for the agricultural region of Canada and the northern half of the United States. This weekly interactive information package produces timely, quantitative and objective information on crop and pasture conditions at the provincial/state, census agricultural region / county, census division, census consolidated subdivision and township levels. It includes colour images and maps, graphs and tables. CCAP is a client/server application developed using Map Objects, Java and Visual Basic. Agriculture and Agri-Food Canada, through Agri-Geomatics and the National Agroclimate Information Service (NAIS), has partnered with Statistics Canada to provide this product free of charge to the public. The CCAP is the longest running, continuous crop monitoring program using Earth Observation data in Canadian history. • Crop Condition Assessment Program Contact: Office: 613-773-2600 Email: agri-geomatics-agrog@agr.gc.ca Statistics Canada 150 Tunney's Pasture Driveway Ottawa, ON K1A 0T6 www26.statcan.ca/ccap-peec/start-debut-eng.jsp
Partners	Agriculture and Agri-Food Canada, Agri-Environment Services Branch, Agri-Environmental Knowledge, Innovation and Technology Directorate
Keyword tags	Agricultural Land Use; Agricultural Production; Barley; Buckwheat; Canary Seed; Canola; Canola Oil; Chickpeas; Corn; Crop Yield; Cultivated Land; Dried Beans; Dried Peas; Durum Wheat; Field Crops; Flaxseed; Fodder Crops; Grains; Growing Season; Legumes; Lentils; Mustard Seed; Nitrogen Fertilizers; Oats; Oilseeds; Precipitation; Prices; Rye; Soybeans; Sugar Beets; Summerfallow; Sunflower Seeds; Vegetable Oils; Wheat; Wheat Flour