

BACKGROUNDER – PROTEIN INDUSTRIES CANADA AND THE INNOVATION SUPERCLUSTERS INITIATIVE

What is the Innovation Supercluster Initiative?

The Innovation Superclusters Initiative will generate over \$700M in new commercial activity and billions in incremental GDP between 2017–2022 to support business-led innovation superclusters with the greatest potential to energize the economy and become engines of growth. Through a small number of high-value, strategic investments this initiative will co-invest with industry in bold and ambitious proposals.

This initiative is a first of its kind for Canada, fostering stronger connections—from large anchor firms to start-ups, from post-secondary institutions to research and government partners—and opening the door to new forms of industry partnership.

What is Protein Industries Canada?

Proteins Industries Canada is a pan-western Canadian cluster – covering Alberta, Saskatchewan and Manitoba - that is an industry led consortium of small- to large-sized enterprises, academic institutions, and other stakeholders involved in crop breeding, agricultural crop production, food and food ingredient processing, and their supporting services companies.,

Our focus is on developing the potential of plant-based proteins from pulses, hemp, oats, wheat, canola flax, and other crops for export to the world.

Protein Industries Canada will drive Canadian global leadership in plant proteins, ingredients and plant co-products, producing significant economic benefits for producers, value-added processors and society at large.

What are our goals?

PIC will build on Canada's strengths to substantially increase global market share in novel protein (and co-products) fractions, ingredients, food and feed products, and technologies. We will seek to:

- Move Canada to second place in global agricultural exports and fifth in agri-food exports,
- Develop a new range of plant-derived foods, ingredients and feedstuffs of superior quality, commanding market premiums.

The pursuit of these goals will produce new revenues and opportunities for Western Canadian producers and processors alike.

How will you achieve this?

PIC's strategy is built on four fundamental pillars:

- Improving seed protein quality and yield
- Improving sustainable production and agricultural information technology
- Fostering innovation in processing technology to create new protein products
- Providing support for companies, marketing, commercialization and trade

Why is this important?

The world is getting hungrier and its tastes are becoming more refined.

- By 2050, the global population is expected to be 30% larger.
- At the same time, people are becoming more affluent. The world middle class is expected to reach approximately 3 billion people worldwide in 2015, all seeking higher quality foods.
- This includes a growing appetite for meat, requiring more high protein feed for animal food production.
- Consumers and the food industry are also increasingly demanding healthy and more sustainable sources of protein.

Put together, this adds up to a projected need for 59% to 98% more protein by 2050.

This is a tremendous opportunity for Western Canadian producers and food processors, but we must be prepared to put in the work to stay ahead of our competitors and move up the value chain. Plant based protein is a \$13 billion market of which Canada currently has a minimal share.

Who will benefit from our work?

- Farmers
- Value-added processors and their employees
- Agricultural researchers and universities
- Entrepreneurs
- Consumers
- Everyone in Western Canada, through direct and indirect economic spin-offs

How will this help the Canadian economy?

- -\$700 million in new commercial activity over the coming five years
- -billions in new GDP
- -over 4700 new jobs by the end of the program together with an ecosystem that will continue to grow into the future

Who's on board?

PIC's membership includes a long and growing list of companies and institutions from across Western Canada. Our current members include:

- 3vGeomatics Inc.
- ABB Inc.
- AdFarm
- Agricultural Manufacturers of Canada
- Agri-Food Supercluster Academic Working Groups Collaboration
- Agriculture and Agri-Food Canada,
 Science and Research Branch (Prairie Region)
- Agrocorp Processing Ltd.
- AGT Food and Ingredients Inc.
- Ag-West Bio Inc.
- Alberta Agriculture and Forestry
- Alberta Canola Producers Commission
- Alberta Food Processors Association
- Alberta Pulse Growers Commission
- Archer Daniels Midland Company
- AVAC Ltd.
- Avrio Capital Inc.
- Balsillie, Jim
- BioPure Oil Corp.
- Bioriginal Food & Science Corp.
- BioTalent Canada
- Bitstrata Systems Inc.
- Blockchain Association of Canada
- Botaneco Inc.
- Burcon NutraScience Corporation
- Canada West Foundation
- Canadian Al Consortium
- Canadian Hemp Trade Alliance
- Canadian Industrial Hemp Corporation
- Canadian International Grains Institute (Cigi)
- Canadian Light Source
- Canaryseed Development Commission of Saskatchewan
- Cando Rail Services
- Canola Council of Canada
- Cargill Limited
- Cereals Canada
- City of Lethbridge
- City of Medicine Hat
- CN

- Conexus Credit Union
- Dot Technology Corp. and SeedMaster Mfg.
- Dow AgroSciences Canada
- DSM Innovation Center
- DuPont Nutrition & Health
- DuPont Pioneer Canada
- Ecoation Innovative Solutions Inc.
- Economic Development Lethbridge
- Economic Development Regina Inc.
- Emerald Seed Products Ltd.
- Enns Brothers
- (Farm Credit Canada)
- Farmers Edge Inc.
- Federated Co-operatives Limited
- FHQ Developments
- FieldSmart
- Food Island Partnership
- Food Processing Development Centre (Leduc)
- G3 Canada Limited
- Genome Alberta
- Genome Canada
- Genome Prairie
- Global Alliance for Improved Nutrition (GAIN)
- Global Institute for Food Security
- Global Transportation Hub
- Government of Alberta
- Government of Manitoba
- Government of Saskatchewan
- Gowling WLG
- Greater Saskatoon Chamber of Commerce
- Commerce
- Greystone Managed Investments Inc.
- InfraReady Products (1998) Limited
- Institute of Nutrition and Functional Foods (INAF)
- International Institute for Sustainable Development, Prairie Climate Centre
- Invest Ottawa
- ISM Canada
- JCA Electronics

- Johnson Shoyama Graduate School of Public Policy
- Leduc-Nisku Economic Development Association
- Lethbridge Chamber of Commerce
- Lethbridge College
- Lethbridge County Council
- Loblaw Companies Limited
- Louis Dreyfus Company Canada
- MacDon Industries Ltd.
- Manitoba Canola Growers
- Manitoba Pulse Soybean Growers
- Maple Grain Limited
- Maple Leaf Foods
- McGill University
- Microsoft Corporation
- Mitacs
- MNP
- Municipal District of Taber
- Mustard 21 Canada Inc.
- National Research Council Canada
- Natural Products Canada Inc.
- Naturally Splendid Enterprises Ltd.
- New Leaf Essentials
- Northstar Robotics Inc.
- Parmalat Canada Inc.
- Parrish & Heimbecker Ltd.
- PEST Surveillance Initiative
- Plant Protein Alliance of Alberta
- POS Bio-Sciences
- Prairie Agricultural Machinery Institute (PAMI)
- Prairie Tide Chemicals
- Protein Highway
- Pulse Canada
- Red River College
- Richardson International Limited
- Roquette Agri-Food Canada
- Rowland Seeds Inc.
- Saskatchewan Canola Development Commission
- Saskatchewan Chamber of Commerce

- Saskatchewan Food Industry Development Centre Inc.
- Saskatchewan Polytechnic
- Saskatchewan Pulse Growers
- Saskatchewan Trade and Export Partnership
- Sightline Innovation Inc.
- Solido Design Automation
- SouthGrow
- Standards Council of Canada
- Stantec Consulting Ltd.
- T Base 4 Investments Corp.
- Tata Consultancy Services Limited
- The Canadian Chamber of Commerce
- The Consortium for Research, Innovation and Transformation in Agri-Food (RITA)
- The Food Development Centre (Portage la Prairie)
- The Manitoba Chambers of Commerce
- The Mosaic Company
- Town of Taber
- University of Alberta Faculty of Agriculture, Life & Environmental Sciences
- University of British Columbia Faculty of Land and Food Systems
- University of Guelph
- University of Lethbridge
- University of Manitoba Faculty of Agricultural and Food Sciences
- University of Ottawa Institute for Science, Society and Policy
- University of Regina
- University of Saskatchewan
- University of Saskatchewan Crop Development Centre
- University of Toronto Faculty of Medicine
- Verdient Foods Inc.
- W.A. Grain & Pulse Solutions
- Warbuton Foods Ltd.
- Westcap Mgt. Ltd.

More information?

For more information on the PIC plan, visit www.proteinindustriescanada.ca