



# Corporate Plan

2024-2025

January 8, 2024

# Table of Contents

<b>Executive Summary</b>	<b>3</b>
<b>Building on Foundations</b>	<b>6</b>
<b>Making Progress: To Canada's Sustainable Future</b>	<b>15</b>
<b>Financial Reporting</b>	<b>28</b>
<b>Intellectual Property Strategy</b>	<b>31</b>
<b>Data and ICT Management</b>	<b>33</b>
<b>Performance Monitoring Strategies</b>	<b>35</b>
<b>Risk Assessments and Mitigation Strategies</b>	<b>36</b>
<b>Technology Program</b>	<b>39</b>
<b>Capacity Building Program</b>	<b>43</b>
<b>Artificial Intelligence Program</b>	<b>46</b>



# Executive Summary

*The growth of Canada's ingredient manufacturing sector can offer economic prosperity, reduced emissions, a strengthened food supply chain and economic resilience, all in the face of a changing global landscape.*

*As a country, we must invest in sectors of the future. Ingredient manufacturing and food processing is one of them. By supporting the evolution of the agricultural sector from commodities to ingredients, food and bio-products, we will unlock a \$25 billion opportunity for Canada, supported by 17,000 jobs.*

*While we remain positive in the long-term drivers and potential of the industry, it is important to acknowledge the short-term headwinds facing the sector. It is a challenging time for early-stage companies from across industries. Higher debt-servicing costs, inflation, a tightening of capital and labour shortages are just a few of the challenges facing Canadian companies. These trials can make it difficult for companies to invest into R&D-related activities, scale-up and reach commercialization. While we are confident in the long-term projections of growth, based on the foundations of a growing global population with an increased demand of protein of all types, there is no doubt that the next 12-18 months will be critical for many Canadian companies. Protein Industries Canada remains committed to Canada's ingredient manufacturing and food processing sectors, and will continue to work within the ecosystem to support our members.*

The 2024–25 fiscal year marks the seventh year for Protein Industries Canada, and our second year under our renewed mandate. With the investment of \$150 million through the Global Innovation Clusters program, along with the continued investment of \$30 million through the Pan-Canadian Artificial Intelligence Strategy, Protein Industries Canada will continue to drive the growth of Canada's plant-based food, feed and ingredient ecosystem, and the creation of a \$25 billion sector by 2035.

Protein Industries Canada's corporate strategy has been developed with the guidance of the Protein Industries Canada Board of Directors and supports the delivery of the objectives and expected results set out by Protein Industries Canada and the Global Innovation Clusters program framework.

## VISION

Canada is a global leader in plant protein.

## MISSION

We invest collaboratively to accelerate innovation and the competitiveness of the Canadian plant-protein sector.



# Progress: The Forward or Onward Movement Toward a Destination

Progress: The act of moving toward goals. Progress is also the best word to describe Protein Industries Canada's plan for the 2024-25 fiscal year.

The previous year, 2023-24, was a year of development marked by the start of our second mandate. Through the recapitalization by the federal government, we were able to put our plans into action, including the realignment of our investment thesis, the launch of the Fund II Technology Program and increased collaboration within the ecosystem. It also saw the release of an updated *Road to \$25 Billion* and the advancement of key relationships with international partners and the capital community.

Now for 2024-25, we will make progress on the foundation that we built this past year. Our destination is clear – a \$25-billion-a-year industry that creates jobs and brings prosperity for Canadians. We recognize that ingredients and bio-based products offer massive potential for Canada, and Protein Industries Canada's priority is to secure the future for Canada's plant-based sector.

## We continue to work toward the long-term goals as set out in our five-year strategic plan, including:

- Support the scale-up and success of Canadian companies through the commercialization of Canadian intellectual property (IP);
- Identify and work toward solutions on the gap in scale-up and R&D;
- Increase capital in the sector;
- Strengthen our global position and support international market development;
- Build new relationships to attract investment and new entrants into the ecosystem;
- Further define Canada's value proposition of plant-based ingredients and food through improved metrics and reporting of sustainability metrics;
- Create opportunities to re-skill and introduce youth, Indigenous Peoples and new Canadians to the plant-based food and ingredient sector; and
- Act as one team with a shared vision and passion to strengthen Canada and create benefit for every Canadian.



# The Road to \$25 Billion

In November 2023, Protein Industries Canada unveiled a new version of *The Road to \$25 Billion*, a roadmap for Canada's ingredient manufacturing, food processing and bio-products sector.

An update on the report originally released in 2021, the new version now outlines the immediate steps required for Canada to seize a \$25 billion annual economic opportunity through value-added processing.

In a rapidly changing global environment characterised by the new realities of climate change, geopolitical tensions, increased competition and a rapidly growing global population, Canada must consider areas of the economy that have the potential to grow and be resilient within this new reality. Canada's ingredient manufacturing sector can offer prosperity, a strengthened food supply chain and economic resilience to Canada in the face of this evolving landscape.

**Investing in ingredient manufacturing, food processing and bio-products not only promises to add \$25 billion a year to our economy and create 17,000 jobs, but also offers several additional benefits:**

- New development to revitalize local communities in the form of 10 to 15 new processing plants across Canada;
- More opportunities for farmers;
- Reduced impact of emissions on global food systems;
- Enhanced security for Canada's food supply chain;
- New relationships to attract investment and new entrants into the ecosystem; and
- The establishment of Canada as a leader in the global food system shift.

The full report can be found at [www.theroadto25billion.ca](http://www.theroadto25billion.ca).



## THE ROAD TO \$25 BILLION



# Building on Foundations

## 2024-25 Objectives and Actions

Protein Industries Canada continues to work toward the long-term objectives of our strategic plan. The fiscal year 2024-25 represents the second year of our current five-year strategy. The objectives of the five-year strategic plan are aligned with the outcomes and recommendations of *The Road to \$25 Billion*. Our overarching goal is to secure Canada's position as a global leader in ingredient manufacturing and food processing, generating new economic growth for Canada, while also lessening the impact of emissions on the global food systems, providing new opportunities for farmers, and helping to secure Canada's food supply chain.

The annual objectives and actions included in the following pages will help reach the long-term objectives below and those included in the *Road to \$25 Billion*.

### Protein Industries Canada will contribute to building a better Canada through:

- **Economic growth:** we will support the prosperity of every Canadian by creating a reliable, sustainable and long-term industry for Canada's economy that will be worth \$25 billion by 2035 and will employ upwards of 17,000 Canadians from coast-to-coast;
- **Reduced GHG emissions:** we will support innovation to decrease GHG reductions related to agriculture and food processing;
- **Scaling Canadian companies:** we will support Canadian companies to grow and be successful, helping the sector achieve \$25 billion in annual revenue from Canadian innovation and intellectual property (IP);
- **Global impact:** we will anchor Canada as a global force in the plant-based revolution—increasing recognition, investment, sales and leadership;
- **Food security:** we will contribute to domestic and international food security by building out an integrated and resilient value chain that allows Canada to make our own ingredients and food and export high-value, nutritious products to countries around the world; and
- **Economic reconciliation:** we will support the prosperity of Indigenous Peoples through meaningful partnerships and mutually beneficial opportunities that lead to shared prosperity.



## Protein Industries Canada's fiscal year 2024–25 priorities fall into five areas of work:

- **Global Leadership** – Canada is a partner of choice to secure the global food supply chain;
- **Ecosystem Evolution** – Canada has a competitive business environment for ingredient manufacturing and food processing;
- **Member Prosperity** – Our members are profitable and are investing for the future;
- **Organizational Relevance** – We are a catalyst for Canada's economic growth; and
- **One Team** – We have a shared vision and passion to strengthen Canada and create benefit for every Canadian.



We will work towards the following actions in fiscal 2024–25 to reach the annual and long-term corporate objectives:

## Global Leadership

Canada is a partner of choice to secure the global food supply chain

OBJECTIVES	INITIATIVES
<p>Canada’s value proposition for ingredient manufacturing is competitive and drives foreign investment</p>	<ul style="list-style-type: none"> <li>• Undertake a jurisdictional review of Canada’s business competitiveness in value-added agriculture</li> <li>• Develop a recommended suite of incentives to increase foreign investment</li> <li>• Develop and execute an action plan to increase foreign direct investment from priority companies</li> <li>• Execute on the 2024 edition of Plant Forward</li> <li>• Support incoming trade and innovation missions</li> </ul>
<p>Members commercialize and export Canadian ingredients, products and services</p>	<ul style="list-style-type: none"> <li>• Share our knowledge with members about key international markets to support members’ export readiness</li> <li>• Conduct a jurisdictional scan of key markets to better understand opportunities and challenges in exporting to them</li> <li>• Complete an IP landscape for plant-based food and ingredient manufacturing in key global markets</li> <li>• Facilitate meaningful collaboration between Canadian ingredient manufacturers and international food processors</li> <li>• Facilitate the commercialization of Canadian food, feed and bio-products in international markets</li> </ul>
<p>Domestic innovation is strengthened by international collaboration</p>	<ul style="list-style-type: none"> <li>• Execute on the Innovate UK partnership agreement</li> <li>• Support members in international research and development collaborations</li> </ul>





OBJECTIVES	INITIATIVES
<p>Protein Industries Canada is the gateway for international relationships in ingredients and food</p>	<ul style="list-style-type: none"> <li>• Create opportunities to showcase Canada and our members to priority international markets</li> <li>• Collaborate with GAC, TCS, Invest in Canada and AAFC to create demand for Canadian products in key international markets, including coordination with Canada’s Indo-Pacific Strategy</li> <li>• Collaborate with international organizations on the development of policies and initiatives aimed at driving growth in the plant-based food sector</li> </ul>



# Ecosystem Evolution

Canada has a competitive business environment for ingredient manufacturing and food processing

OBJECTIVES	INITIATIVES
<p>Value-added agriculture, ingredient manufacturing, food processing and bio-products is a priority sector for Canada</p>	<ul style="list-style-type: none"> <li>• Leverage <i>The Road to \$25 Billion</i> to increase the awareness of the opportunities, challenges and potential solutions to grow the sector</li> <li>• Develop and execute on an engagement plan for all levels of government to implement the recommendations in <i>The Road to \$25 Billion</i></li> <li>• Engage with commodity organizations and industry associations to increase support for the recommendations in <i>The Road to \$25 Billion</i></li> </ul>
<p>Canada’s regulatory system is responsive and supports innovation and commercialization of novel ingredients, food, feed and bio products</p>	<ul style="list-style-type: none"> <li>• Execute on the Centre for Regulatory Research and Innovation (CRRRI)’s year one work plan</li> <li>• Engage with Technology Leadership project participants to proactively address regulatory and policy hurdles</li> <li>• Advocate for policy and regulatory changes that support sector growth</li> <li>• Drive the creation of data sets to support regulatory and policy changes</li> </ul>
<p>Canada has the capital and invests to retain, grow and scale domestic companies</p>	<ul style="list-style-type: none"> <li>• Develop and recommend a suite of incentives to support domestic companies’ ability to scale up ingredient processing and manufacturing</li> <li>• Work to align current Government of Canada innovation and scale-up agencies and programs to support the ingredient manufacturing sector</li> <li>• Provide the capital community with relevant knowledge of Canada’s value-added agriculture sector</li> <li>• Collaborate with the capital community on solutions for ingredient manufacturers</li> <li>• Create meaningful connections between members and the capital community</li> </ul>



OBJECTIVES	INITIATIVES
<p>Canadian companies are improving productivity and addressing labour and skill gaps through training and innovation</p>	<ul style="list-style-type: none"> <li>• Work to develop technical expertise, PhD and post-doctoral fellowship exchanges with select universities and research institutions</li> <li>• Elevate value-added agriculture to increase support from federal and provincial government labour and skills programming</li> <li>• Encourage Technology Leadership projects to invest in technologies that improve productivity</li> </ul>
<p>Members have access to research, innovation and scale-up infrastructure</p>	<ul style="list-style-type: none"> <li>• Support companies in navigating domestic and international research and scale-up infrastructure</li> <li>• Collaborate with the private sector, equipment manufacturers and all levels of government to evaluate and build the business case for a Canadian-based ingredient innovation, scale-up and co-manufacturing facility</li> </ul>
<p>Canada's ingredient manufacturing and food processing environmental sustainability position is recognized and leveraged as an asset</p>	<ul style="list-style-type: none"> <li>• Quantify the environmental sustainability of Canadian ingredients compared to other jurisdictions</li> <li>• Collaborate with other national initiatives to develop and implement an effective MRV system</li> <li>• Support Technology Leadership projects and members in measuring the environmental sustainability of products</li> </ul>
<p>Under-represented groups benefit from the economic growth of the sector</p>	<ul style="list-style-type: none"> <li>• Ensure all Protein Industries Canada-funded projects contribute to Economic Reconciliation</li> <li>• Use the Capacity Building Fund to support the development of projects that bring benefit to Indigenous Peoples and new Canadians.</li> </ul>



# Member Prosperity

Our members are profitable and are investing for the future

OBJECTIVES	INITIATIVES
<p>Members commercialize profitable products and services</p>	<ul style="list-style-type: none"> <li>• Identify synergies and further partnerships to bring additional investment into member companies</li> <li>• Manage project portfolio to ensure alignment with our strategic plan</li> <li>• Manage toward outcomes of Technology Leadership projects to support commercialization of innovative Canadian IP</li> </ul>
<p>Members have meaningful partnerships and collaboration opportunities</p>	<ul style="list-style-type: none"> <li>• Seek follow-on partnerships for existing projects</li> <li>• Ensure project concepts that are viable but not supported by Protein Industries Canada are channeled to alternative funding sources</li> <li>• Organize member events, workshops and webinars to support member collaboration and learning</li> <li>• Increase awareness and usage of the member portal and IP Hub</li> </ul>
<p>Members increase their Business Expenditure on Research and Development (BERD)</p>	<ul style="list-style-type: none"> <li>• Identify gaps in current innovation funding programs and propose solutions to align existing programs with the needs of the sector</li> <li>• Deliver the Technology Leadership program with a focus on achieving the target IMF ratio</li> </ul>



# Organizational Relevance

We are a catalyst for Canada's economic growth

OBJECTIVES	INITIATIVES
<p>Protein Industries Canada is positioned to continue to support the growth of the sector</p>	<ul style="list-style-type: none"> <li>• Position Protein Industries Canada as a partner to deliver innovation and capital funding</li> <li>• Continue to develop expertise in ingredient manufacturing and food processing</li> <li>• Systemize data and insight of the ecosystem and our members</li> <li>• Evaluate additional revenue streams</li> </ul>

# One Team

We have a shared vision and passion to strengthen Canada and create benefit for every Canadian

OBJECTIVES	INITIATIVES
<p>A Board of Directors that establishes the strategic direction and provides strong governance oversight</p>	<ul style="list-style-type: none"> <li>• Ensure the board has the tools and information needed to provide strategic direction and manage risk</li> <li>• Support the board to be champions for the organization</li> <li>• Ensure the board is equipped to assess, monitor and implement governance best practices</li> </ul>
<p>Protein Industries Canada decision-making framework operates in an effective control environment</p>	<ul style="list-style-type: none"> <li>• Ensure a secure IT environment that will respect the integrity and confidentiality of member information</li> <li>• Review and refine the internal project audit process</li> <li>• Complete an annual review of all projects</li> </ul>
<p>Protein Industries Canada provides a high level of service standards to our stakeholders (Board, ISED and Members)</p>	<ul style="list-style-type: none"> <li>• Ensure timely, transparent and effective communication of our activities to all stakeholders</li> <li>• Conduct our Business Development activities in a timely manner that aligns with our strategic plan</li> <li>• Conduct all member interaction in a professional manner</li> <li>• Improve our CRM system to better understand member needs and sector-wide statistics</li> </ul>



OBJECTIVES	INITIATIVES
<p>Protein Industries Canada is a values-based, diverse and inclusive organization where differences are acknowledged and celebrated</p>	<ul style="list-style-type: none"> <li>• Ensure all staff have opportunities to participate in professional development activities</li> <li>• Implement the new work planning process and performance management framework</li> <li>• Implement a new compensation program to support the long-term sustainability of the organization</li> <li>• Approach our work with a cross-functional, one-team approach</li> <li>• Be intentional in fostering an inclusive workplace environment</li> <li>• Build on corporate-wide training (The Four Seasons of Reconciliation) to further understanding among staff about Indigenous Reconciliation</li> <li>• Ensure job postings are more accessible to potential Indigenous candidates</li> </ul>



# Making Progress: To Canada's Sustainable Future

## Results on Objectives for 2023–24

February 2023 brought the news that Protein Industries Canada, through the Global Innovation Clusters Program, had received a second mandate and a further \$150 million for the continued support of Canada's ingredient manufacturing and food processing sector. This investment allowed Protein Industries Canada to keep progressing on our mandate; it also signaled that ingredient manufacturing and food processing is important to the Government of Canada. As fiscal year 2023–24 was the first year of our second mandate, much of the actions focused on building the framework and implementing the process to deliver on our second fund. In addition to continuing with delivering innovation programming, Protein Industries Canada continued to focus on building and connecting the ecosystem.

### Significant accomplishments of 2023–24 included:

- The opening of our Technology Leadership Program with three calls for projects, including a special call with Innovate UK – our first international R&D collaboration;
- As a result of the Calls for Projects, we have a pipeline of projects worth more than \$113 million, with 11 approved projects and 16 more in development;
- More than one-third of EOIs were led by partners new to the ecosystem;
- In partnership with NRC-IRAP, we led our first international mission to the UK, with six industry partners;



- Our largest AGM to date, with more than 160 attendees;
- The launch of the Evolution Tour, a nation-wide roadshow to connect with the ecosystem, with more than 400 people attending the seven events;
- The launch of a new version of the Roadmap, *The Road to \$25 Billion*;
- Attendance at events in the United States, the United Kingdom, Germany and Singapore – building key relationships with our international partners;
- Our first call for projects under the Capacity Building Program stream within the priority area of “An inclusive sector that brings benefit to every Canadian”, under which we received eight expressions of interest;
- Continued work on the Artificial Intelligence Program stream, through which we approved three more projects, including the Data Readiness Improvement Program; and
- The successful wrap-up of Fund I, closing out 55 projects from our first mandate and supporting the development of 455 new IP assets.

**The core work of Protein Industries Canada in 2023–24 revolved around five main themes:**

- Global Leadership – Canada is a partner of choice to secure the global food supply chain;
- Ecosystem Evolution – Canada is the preferred place to do business;
- Member Prosperity – Our members are profitable and are contributing to Canada’s economy;
- Organizational Relevance – We are a mainstay of Canada’s innovation landscape; and
- One Team – We have a shared vision and passion to strengthen Canada and create benefit for every Canadian.





# Global Leadership

Canada is a partner of choice to secure the global food supply chain

## Objective

Canada’s value proposition for plant-based food, feed and ingredients is well understood in key markets.

ACTIONS	RESULTS
<ul style="list-style-type: none"> <li>• Take a more strategic and deliberate approach to international events and conferences that align with Protein Industries Canada’s International Engagement Strategy</li> <li>• Plan for and execute on the 2024 edition of Plant Forward</li> <li>• Support incoming trade and innovation missions</li> </ul>	<ul style="list-style-type: none"> <li>• An update to Protein Industries Canada’s International Engagement Strategy was complete, with a focus on geographic priority markets of the United Kingdom, Europe, the United States and Asia, aligned with objectives of market development, research collaboration, FDI and capital.</li> <li>• The activities undertaken over the past year were aligned with the objectives of the strategy, including attending events in key markets of the United Kingdom, Europe, the United States and Singapore.</li> <li>• Announced Plant Forward 2024 – the agenda is in development and registration is currently open.</li> <li>• Supported incoming missions from the Netherlands and the United Kingdom.</li> </ul>

## Objective

Protein Industries Canada members experience meaningful collaboration with international partners.

ACTIONS	RESULTS
<ul style="list-style-type: none"> <li>• Explore and facilitate a collaborative research and development call with Innovate UK and Wageningen University and Research (Netherlands)</li> <li>• Support members in international research and development collaborations</li> </ul>	<ul style="list-style-type: none"> <li>• Launched a collaborative R&amp;D call for Technology Projects with Innovate UK, receiving eight joint EOIs (between Canadian and UK companies).</li> <li>• Continued conversations with The Netherlands and Wageningen University to support the protein transition.</li> <li>• Created opportunities for Protein Industries Canada members to form connections with potential partners in the United Kingdom, the Netherlands, the United States and Asia.</li> </ul>



## Objective

Protein Industries Canada is viewed as a strong contributor to national and international initiatives.

ACTIONS	RESULTS
<ul style="list-style-type: none"><li>• Continue to participate in national initiatives such as the implementation of The Next Green Revolution and the Advisory Committee of the University of Guelph’s Feeding the Future with Canadian Technology</li><li>• Collaborate on initiatives with organizations such as the World Economic Forum, UNFCCC and the FAO on the development of policies, papers and statements related to agriculture’s impact on the environment</li><li>• Actively participate as a member of the Canadian delegation for COP-28</li></ul>	<ul style="list-style-type: none"><li>• Protein Industries Canada is a member of The Canadian Alliance for Net-Zero Agri-food (CANZA), which represents the evolution of The Next Green Revolution.</li><li>• Protein Industries Canada issued a request for a collaborative project to create an MRV system to support Canada’s sustainability claims and to further the sector both domestically and internationally.</li><li>• Protein Industries Canada made the decision not to attend COP-28 considering the high travel costs and the higher focus on energy transition and climate-smart investment versus agriculture and food.</li></ul>



# Economic Evolution

Canada is the preferred place to do business.

## Objective

Protein Industries Canada members have the information they need to make informed business decisions and to contribute to the growth of the ecosystem.

ACTIONS	RESULTS
<ul style="list-style-type: none"> <li>• Measure the progress and identify the next set of priorities on <i>TheRoad to \$25 Billion</i></li> <li>• Review the outcomes of Fund I projects (e.g., asset maps, reports, strategies, market research) and identify opportunities to leverage, share and expand on their findings</li> <li>• Broaden and expand the EY report to better reflect the diversity of the sector</li> <li>• Deeply understand Canada’s competitive landscape and create awareness with stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluated and scored actions of the initial <i>Road to \$25 Billion</i>, which were incorporated into the development of the updated Roadmap.</li> <li>• Implemented the Centre for Regulatory Research and Innovation.</li> <li>• Completed a final review of all Fund I projects. Built off the success and foundations of Fund I projects to advance the next generation of projects for Fund II.</li> <li>• Used stakeholder engagement and market research to develop a new investment thesis for Fund II.</li> <li>• Worked with EY to undertake an updated Market Forecast and Competitiveness Study, which was released in September 2023. The updated report included expanded categories and insights into the ecosystem, knowledge and awareness.</li> <li>• Building off the work of <i>Ady Advantage</i> completed in 2021, provincial summaries were created and communicated to provincial governments, members and the larger ecosystem to raise awareness of Canada’s strengths and weaknesses to other jurisdictions. In addition, in development of the updated <i>Road to \$25 Billion</i>, further analysis on Canada’s competitiveness was undertaken and incorporated into the recommendations.</li> </ul>



**Objective**

Canada’s regulatory system is responsive and supports innovation and commercialization in the plant-based food, feed and ingredient sector.

ACTIONS	RESULTS
<ul style="list-style-type: none"> <li>• Implement the five-year Regulatory Centre of Excellence strategic plan</li> <li>• Engage with technology project participants to proactively address regulatory hurdles</li> </ul>	<ul style="list-style-type: none"> <li>• In 2023-24, the Regulatory Centre of Excellence helped companies across the plant protein ecosystem navigate Canada’s regulatory system while addressing knowledge gaps related to regulatory modernization in three main areas:               <ul style="list-style-type: none"> <li>◦ How protein labelling regulations from other jurisdictions may be applied in Canada without negatively impacting nutrient density and protein quality;</li> <li>◦ How nomenclature around product labelling affects purchase decisions and consumer interpretation of such products; and</li> <li>◦ The validation of an in-vitro way of determining protein digestibility, to reduce animal testing.</li> </ul> </li> <li>• Protein Industries Canada is continuing its regulatory modernization research work with industry partners through the project’s second phase called “The Centre for Regulatory Research and Innovation”, with another four years of investment announced in December 2023.</li> </ul>

**Objective**

Protein Industries Canada members have access to the capital they need to scale their businesses.

ACTIONS	RESULTS
<ul style="list-style-type: none"> <li>• Provide knowledge of the sector to the capital community</li> <li>• Continue to work with the capital community on solutions for ingredient manufacturers</li> <li>• Create meaningful connections between members and the capital community</li> </ul>	<ul style="list-style-type: none"> <li>• In 2023-24 Protein Industries Canada hosted two Access to Capital workshops, in Vancouver and Toronto. The two roundtables had more than 35 members of the capital community attend.</li> <li>• In addition, Protein Industries Canada made new connections to the capital community and facilitated connections to members by attending the Invest in Canada Conference, participating in the Pathways to Silicon Valley event in San Francisco and participated as an ecosystem partner in the Founded in Canada Showcase event, where three of the eight company finalists were Protein Industries Canada female-led companies.</li> </ul>



## Objective

A labour force and talent pool strong enough to support the growth of Canada’s plant-based food, feed and ingredient sector.

ACTIONS	RESULTS
<ul style="list-style-type: none"><li>Collaborate to implement the National Workforce Strategic Plan for the plant-based food, feed and ingredient sector</li><li>Work to develop technical expertise, PhD and post doctoral fellowship exchanges with select universities and research institutions</li></ul>	<ul style="list-style-type: none"><li>Over the past year, Protein Industries Canada engaged Palette Skills to undertake engagement with stakeholders to determine the greatest need for the future workforce.</li><li>Roundtables with Canadian ingredient manufacturers were held to discuss their current and future staffing needs, and to define the skills required for their workforce.</li><li>Information gathered at the roundtables will be used to refine future workforce requirements for the ingredient sector, and to frame future calls for Capacity Building projects.</li></ul>

## Objective

Protein Industries Canada members have access to research, innovation and scale-up infrastructure.

ACTIONS	RESULTS
<ul style="list-style-type: none"><li>Support companies in navigating domestic and international research and scale-up infrastructure</li><li>Collaborate with private sector companies, equipment manufacturers and all levels of government to evaluate and build the business case for a Canadian-based ingredient innovation, scale up and co-manufacturing facility</li></ul>	<ul style="list-style-type: none"><li>In 2023–24 Protein Industries Canada undertook extensive work to better understand the need for research, innovation and scale-up infrastructure, including:<ul style="list-style-type: none"><li>Worked with a consultant to develop a report to better understand the requirements of scale-up facilities to enhance development of the Canadian plant-protein and ingredient industry and make recommendations for next steps;</li><li>Toured and met with global ingredient processing equipment manufacturers to better understand their operations and any potential expansions to Canada; and</li><li>Partnered with the Government of British Columbia to better understand the need for co-manufacturing in the food space.</li></ul></li></ul>



### Objective

Canada’s plant-based food, feed and ingredient sustainability position is understood, quantified and communicated.

ACTIONS	RESULTS
<ul style="list-style-type: none"><li>• Work to refine Canada’s sustainability value proposition</li><li>• Collaborate to develop a large multidisciplinary project, in collaboration with other Global Innovation Clusters, aimed at developing an effective Measurement, Verification and Reporting (MVR) system</li></ul>	<ul style="list-style-type: none"><li>• By working with groups such as Canadian Alliance for Net-Zero Agri-food (CANZA) and the National Index on Agri-Food Performance, Protein Industries Canada continues to define and better understand Canada’s sustainability value-proposition.</li><li>• In January 2024, a request was issued for a collaborative Capacity Building project to develop an effective Measurement, Verification and Reporting system.</li></ul>

### Objective

Underrepresented groups benefit from the economic growth of the sector.

ACTIONS	RESULTS
<ul style="list-style-type: none"><li>• Ensure all Protein Industries Canada-funded projects contribute to Economic Reconciliation</li><li>• Build on the most successful talents and skills projects from Fund I (Palette Skills and SIIT micro-credential program) to ensure more training for underrepresented groups</li></ul>	<ul style="list-style-type: none"><li>• It is a requirement of all Fund II projects to include a commitment to Economic Reconciliation, and Protein Industries Canada has an in-house resource to support consortiums in the development of their Economic Reconciliation plans.</li><li>• In October 2023, Protein Industries Canada launched our first call for Capacity Building Projects under Fund II. The first call was specific to projects within the priority area of “An inclusive sector that brings benefit to every Canadian”. Projects needed to demonstrate how they will contribute to Economic Reconciliation, training and job development for Indigenous youth or under-represented groups and/or social well-being for Canadians.<ul style="list-style-type: none"><li>◦ As a result of the call, seven EOIs were received.</li></ul></li></ul>



# Member Prosperity

Our members are profitable and are contributing to Canada's economy.

## Objective

**Protein Industries Canada members commercialize profitable products and services and scale their businesses.**

ACTIONS	RESULTS
<ul style="list-style-type: none"><li>• Review the Fund I IP portfolio and identify stacking, cross licensing and commercialization opportunities</li><li>• Identify synergies and further partnerships to bring other investment into Protein Industries Canada-funded projects</li><li>• Establish a project portfolio that aligns with our strategic plan and drives toward the target category spends</li><li>• Implement a more robust project assessment and project tracking framework (risk analysis, two stage financial due diligence etc.) to help ensure commercial success</li></ul>	<ul style="list-style-type: none"><li>• In Fund II, Protein Industries Canada implemented a two-phase due diligence process to better manage risk and outcomes of projects, with a specific focus on the ability to reach commercialization.</li><li>• As of January 12, 2024, 66 per cent of projects moving to full proposal fell under the Ingredient pillar, with 26 per cent to Products, 9 per cent Genetics and 0 per cent to Crops.</li><li>• Many of the Fund II projects build off successes and IP created within Fund I projects, with enhanced consortiums and objectives of commercialization in the next generation of projects.</li><li>• Protein Industries Canada is in the process of commissioning an IP Landscape report for our sector to show white space opportunities to develop new technologies.</li><li>• Implemented annual project review for all Fund II projects. This review will help identify any new risks to project success or commercialization, while also helping to manage the investment fund to actuals of project spend.</li></ul>



## Objective

Protein Industries Canada technology projects create meaningful partnerships for members.

ACTIONS	RESULTS
<ul style="list-style-type: none"><li>• Increase the minimum level of collaboration on Protein Industries Canada projects from two to three</li><li>• Strengthen the value chain approach in collaborative innovation</li><li>• Ensure project concepts that are viable but not supported by Protein Industries Canada are channeled to alternative funding sources</li></ul>	<ul style="list-style-type: none"><li>• All Technology Leadership Projects have met the requirement of three collaborators within the consortium.</li><li>• In 27 Fund II projects to date (Dec. 15, 2023), there are 112 consortium partners, representing an average of 4.1 collaborators per consortium.</li><li>• Protein Industries Canada has relationships with NRC, AAFC, PrairiesCan and the Strategic Innovation Fund to share projects that are either not a fit with Protein Industries Canada, or looking for the next stage of funding.</li></ul>

## Objective

Protein Industries Canada members have sufficient opportunities to create new collaborations.

ACTIONS	RESULTS
<ul style="list-style-type: none"><li>• Hold a series of member events, workshops and webinars</li><li>• Increase engagement and usage of the member portal and IP Hub</li><li>• Revise membership structure to be more inclusive of the ecosystem</li></ul>	<ul style="list-style-type: none"><li>• Early in the fiscal year, Protein Industries Canada hosted the Evolution Tour, holding in-person events at seven locations across Canada. The Evolution Tour provided an opportunity for members of the ecosystem to better understand the priorities of Protein Industries Canada and the project process under Fund II.</li><li>• More than 400 people attended the Evolution Tour.</li><li>• A spotlight on the member portal and IP Hub is included in Protein Industries Canada's membership newsletter on a bi-monthly basis.</li><li>• At the 2023 Annual General Meeting, Protein Industries Canada accepted a recommendation to change the membership structure to one class of membership, therefore creating a more inclusive membership structure that presents equal benefits to all members. Information on membership can be found at: <a href="https://www.proteinindustriescanada.ca/join">https://www.proteinindustriescanada.ca/join</a></li></ul>





# Organizational Relevance

We are a mainstay of Canada’s innovation landscape.

## Objective

Protein Industries Canada is a going concern beyond March 31, 2028.

ACTIONS	RESULTS
<ul style="list-style-type: none"><li>• Identify additional sources of long-term funding for Protein Industries Canada supported investments</li><li>• Evaluate additional sources of revenue to support operations</li></ul>	<ul style="list-style-type: none"><li>• In November 2023, Protein Industries Canada released an updated version of <i>The Road to \$25 Billion</i>. The Roadmap outlines the potential of the industry to be an economy of the future for Canada, and the work that needs to be done to capture the opportunity. The Roadmap outlines the necessary actions that must be done over the next five to 10 years.</li><li>• The future sustainability of the organization, and our role in creating economic growth for Canada, is a strategic priority for the board of directors and will continue to be discussed.</li></ul>



# One Team

We have a shared vision and passion to strengthen Canada and create benefit for every Canadian.

## Objective

**A Board of Directors that establishes the strategic direction and assists in execution.**

ACTIONS	RESULTS
<ul style="list-style-type: none"> <li>• Ensure the board has the tools and information needed to provide strategic direction</li> <li>• Support the board to be champions for the organization</li> </ul>	<ul style="list-style-type: none"> <li>• The Board of Directors participated in two strategic planning sessions a year, and all new board members received a full-day board orientation.</li> <li>• Reviewed all policies and procedures related to conflict of interest and project selection.</li> <li>• Working with other Global Innovation Clusters to develop a set of governance guiding principles.</li> <li>• Key messages on strategic priorities are shared with the board; and board members are engaged as part of stakeholder relation efforts.</li> </ul>

## Objective

**Protein Industries Canada programs and services are delivered in an efficient and effective manner.**

ACTIONS	RESULTS
<ul style="list-style-type: none"> <li>• Implement best practices, lessons learned and new technologies to improve efficiency and member experience</li> <li>• Ensure a secure IT environment that will respect the integrity and confidentiality of information</li> </ul>	<ul style="list-style-type: none"> <li>• Multi-factor authentication and Bitlocker-encryption installed on every computer in the organization.</li> <li>• Strengthened device usage policy providing clear guidance and expectations delivered to all staff.</li> <li>• Published project management guide and provided costing guidance to all project participants.</li> <li>• Updated the Project Selection Guidance Document for all programs.</li> </ul>



## Objective

Protein Industries Canada is a values-based, diverse and inclusive organization where differences are acknowledged and celebrated.

ACTIONS	RESULTS
<ul style="list-style-type: none"><li>• Allocate two per cent of base salaries to professional development activities</li><li>• Improve formal communication within the organization</li><li>• Approach our work with a cross-functional, one-team approach</li><li>• Be intentional in fostering an inclusive workplace environment</li><li>• Ensure job postings are more accessible to potential Indigenous candidates</li></ul>	<ul style="list-style-type: none"><li>• A monthly email to all staff from the CEO was implemented in 2023.</li><li>• An annual staff survey was completed with 100% participation rate.</li><li>• 84% of staff report feeling good to great about their work at Protein Industries Canada.</li><li>• 81% say that Protein Industries Canada “mostly to always” fosters a comfortable and supportive work environment and rate diversity at Protein Industries Canada at 3.9 out of 5.</li><li>• Protein Industries Canada continues to participate in the 30-50 challenge.</li><li>• All job postings in 2023-24 were posted on <a href="http://www.proteinsupercluster.ca">www.proteinsupercluster.ca</a> as well as on two job boards specific to the Indigenous community.</li><li>• Implemented a new compensation program for all staff.</li><li>• Protein Industries Canada continues to make staff development a priority, and personal development is included in every employee’s annual workplan.</li><li>• Protein Industries Canada holds an annual all-staff meeting that includes a day of professional development for all staff.</li></ul>



# Financial Reporting

## 2024–2025 Expenditures

EXPENDITURES	O & A	GIC	PC AIS	TOTAL
Technology program		22,495,000	11,622,559	34,117,559
Salaries & benefits	4,300,003			4,300,003
Capacity building program		1,980,500	300,000	2,280,500
Office & administration	1,181,885			1,181,885
Marketing, materials & events	652,000			652,000
Consulting & professional fees	439,764			439,764
Other	17,469			17,469
<b>TOTAL</b>	<b>6,591,121</b>	<b>24,475,500</b>	<b>11,922,559</b>	<b>42,989,180</b>

\*accrual basis



# 2024–2025 Anticipated revenue from other sources

## Anticipated amount of industry-matching funds to be received in the upcoming fiscal year

INDUSTRY MATCHING FUNDS	GIC	PCAIS	OTHER	TOTAL
Industry contribution toward eligible project costs	23,619,750	12,203,687		35,823,437
Project management fees	1,709,620	883,314		2,592,934
Membership			73,667	73,667
Other				
<b>TOTAL</b>	<b>25,329,370</b>	<b>13,087,001</b>	<b>73,667</b>	<b>38,490,038</b>

## Anticipated revenues from all other sources

ALL OTHER SOURCES	GIC	PCAIS	OTHER	TOTAL
Membership			31,571	
Interest income			300,000	
<b>TOTAL</b>			<b>331,571</b>	<b>331,571</b>

## Total anticipated revenue from other sources:

OTHER SOURCES	GIC	PCAIS	OTHER	TOTAL
<b>TOTAL</b>	<b>25,329,370</b>	<b>13,087,001</b>	<b>405,238</b>	<b>38,821,609</b>



## 2023–2024 Sources of ISED funding

<b>INCOMING</b>		
Global Innovation Clusters contribution	27,794,656	
Pan-Canadian AI Strategy contribution	12,370,298	
Project management fees	2,592,934	
Membership and registration fees	105,238	
Other revenue	300,000	
Total items involving cash		43,163,117
<b>ITEMS NOT INVOLVING CASH</b>		
Amortization of property, plant and equipment	17,649	
Total items not involving cash		17,649
<b>TOTAL ANNUAL CASHFLOW</b>		<b>43,180,766</b>

Protein Industries Canada does not owe any amounts to the crown pursuant to any legislation or agreement.



# Intellectual Property Strategy

With the close of Fund I and start of projects under Fund II, we continue to be aware of the ongoing need for organizations, particularly SMEs, to have access to tools, training and expertise to support their understanding of strategic management of IP. The initiatives below describe actions Protein Industries Canada continues to undertake to support Canadian organizations in the creation, protection, commercialization and, ultimately, value creation from intellectual property. An update to Protein Industries Canada's IP Strategy is presently in development.

## IP Rationales

Organizations participating in Protein Industries Canada-supported projects are required to develop an IP Strategy for their project, referred to as the IP Rationale. The rationale process requires that project partners contemplate Background IP (including, where applicable, Fund I IP), Foreground IP and commercialization opportunities. The rationale is revisited at Steering Committee meetings and updated as required. Resolving ownership and access questions at the outset prevents disputes as a project proceeds. Introducing the rationale process to project participants provides them with a basic framework for IP strategy development that can be applied to subsequent internal or collaborative technology development projects.

**We want to enable sophistication whether pursuing registered or non-registered IP and encourage:**

- Knowledge of a company's competitive landscape;
- Use of well-researched trademarks in support of commercial products and services; and
- Secure and practical protocols for physical and digital knowledge assets.

## IP Hub

Protein Industries Canada has developed an IP Hub to serve as a marketplace for Intellectual Property created by Canada's agrifood sector. The IP Hub is accessible to Protein Industries Canada members via an online portal. Conceived as a mechanism by which Protein Industries Canada members may identify collaboration and licensing opportunities, the IP Hub is also used by academic and research institutes (e.g. NRC) as a platform to build awareness around latent and emerging IP available for license. Protein Industries Canada tracks IP generated over the course of each project and actual commercialization outcomes. Only non-confidential IP is featured on the IP Hub.



## Literacy and Training

Stakeholder consultations indicate that Protein Industries Canada members find a benefit in intellectual property programming provided by Protein Industries Canada. At the close of Fund I, more than three-quarters of Technology Leadership project participants reported an increase in their IP literacy as a result of working with Protein Industries Canada. Protein Industries Canada will continue to diversify the type of training offered to members to ensure that training addresses specific risks facing organizations active across the value chain, including training in trademarks, trade secrets and domain names, digital technology/AI and patent opportunities for ingredient manufacturers.

A patent landscape project is in planning for 2024. Insights from the resulting report will be shared with Protein Industries Canada members.

## Direct Assistance

Beyond development of a project's IP Rationale, member companies often require direct assistance with intellectual property questions. Through the Director of IP, companies can get 1:1 or consortium-level support to assist them with:

- Recognition and naming of IP developed in a project;
- Possible approaches to protecting the IP (e.g. patent vs. trade secret protection);
- Techniques for day-to-day IP management and maintenance of confidentiality; and
- Understanding and heading-off potential impact of freedom-to-operate issues.

Protein Industries Canada also connects members with prospective service providers and resources.





# Data and ICT Management

Driven by growing awareness of data as an asset unto itself, a revised Data Strategy for Protein Industries Canada is currently in development, expected to be released in 2024. As more companies become holders and processors of data in this sector, the need for structured data governance and accountability has only grown.

## Data Management Framework

Protein Industries Canada, in its registries, information systems, records, databases, financials and performance measures, can serve as a model data user. Through protocols established in Fund I, Protein Industries Canada will continue to collect, process, aggregate and manage data with best practice use of confidentiality and consent practices and internal data governance.

## Data in Projects

Similar to the IP Rationale, each project currently requires participants to provide a breakdown of Background Data Sets, Foreground Data Sets, and Commercialization and Sharing Plans. In Fund II projects, companies are also encouraged to expand on their internal data governance approach and provide strategies for data security, storage, access, retention, privacy and regulatory compliance. Direct support is provided for development of such data plans, in particular to resolve ownership and access questions to prevent disputes.

## Access to Training and Tools

Through the AI stream, Protein Industries Canada has developed a data feasibility assessment framework that is being applied in project evaluation. Working with Alberta Machine Intelligence Institute (Amii), Protein Industries Canada is also supporting a Data Readiness Improvement Program with training for companies to develop readiness for AI applications by studying and applying practical use cases. Compliance training for Bill C-27 (*Digital Charter Implementation Act*) is planned, including encouragement of companies to self-evaluate AI risk using the Government of Canada's Algorithmic Impact Assessment Tool.



# Agrifood Data Legal Landscape

Protein Industries Canada is continuing to participate in and support data-related projects in collaboration with Enterprise Machine Intelligence & Learning Initiative (EMILI). To bring awareness to the complex legal framework in the sector, Protein Industries Canada has been contributing to an agrifood data legal landscape project coordinated by EMILI, touching on ownership, privacy and contracts. The project considered legal issues both from the perspective of data contributors and users, and included treatment of evolving legislation, international standards and emerging structures such as data trusts. The project deliverables will be released in sections in 2024.

## Other Uses of Data

Across the value chain, companies are more aware of sustainability issues and increasingly wish to set sustainability goals. Protein Industries Canada encourages companies to undertake quantitative sustainability analyses of their own processes and products (e.g. life cycle analysis) and continues to gather related resources.



# Performance Monitoring Strategies

## Innovation Cluster Ecosystem Impact Framework (ICEIF)

To ensure the program's performance measurement approach fully captures the unique impact each Cluster is delivering, ISED and the Clusters have co-designed a unique, made-in-Canada performance measurement framework approach: the Innovation Cluster Ecosystem Impact Framework (ICEIF).

While all Clusters share certain commonalities, the framework is tailored so that each cluster is able to tell their own performance story with metrics, both qualitative and/or quantitative, that best reflect their contribution to achieving the program objectives. The framework's structure accommodates government reporting requirements through a set of core program metrics and ensures Clusters have appropriate autonomy and flexibility through their own individual and flexible Impact Frameworks.

### A Shared Architecture:

The program and each cluster identified a set of metrics against the four program objectives:



**A National Force:** Develop ecosystems that create a global advantage for Canada by attracting investment, developing a global profile and collaborating on projects at a national scale.

**A Creator of Networks:** Strengthen connections and collaborations between private, public and academic organizations to drive impactful commercialization outcomes and develop domestic capacity.

**A Driver of Growth:** Accelerate the scale-up of SMEs in cluster projects by fostering collaboration and integration into emerging value chains, in order to drive international opportunities, expand market share and grow revenues.

**A Catalyst for Skills Development:** Address skills gaps, act as a magnet for global talent, collaboration, skills and talent development, and foster opportunities for equity-seeking groups to benefit from connections, in order to drive innovation and contribute to inclusive economic growth.



# Risk Assessments and Mitigation Strategies

Protein Industries Canada's strategic plan is the foundation for its risk management program. Risks are assessed quarterly by management and identified as low (green), moderate (yellow) and high (red). For any risk that falls into the moderate or high category, mitigation strategies are developed and brought forward to the Audit and Finance Committee on behalf of the board.

## Annual Aggregated Total Risk Score

In 2023-24, Protein Industries Canada's Board of Directors reviewed the Risk Management Framework and made adjustments to adopt an aggregated total risk score. The aggregated risk score defines the organization's overall risk tolerance as a numerical risk score.

The number of risks and the organization's ability to mitigate the risks will vary year-by-year. To ensure that the organization is operating within an acceptable level of risk, and that the Board is aligned with organization's risk appetite, the following amendments were adopted as part of the Risk Management Plan:

1. An aggregate risk score is calculated annually;
2. Historical aggregate risk scores and any other risk trends identified are included in the Risk Management Plan;
3. Management presents a quarterly Risk Report to the Audit & Finance Committee. The Risk Report will identify any new risks, an update on risks in the red category, risks that have moved on the heat map and any revisions or updates to the mitigation strategies; and
4. An acceptable risk range is determined for the aggregate risk score and Management is required to ensure the organization is within that risk range.

The average risk score for the past four years was 424.

The acceptable risk range has both a maximum and minimum to ensure that Management is thoroughly identifying all of the risks and ensuring the organization is maintaining an acceptable level of risk. It was decided that the acceptable risk range for the organization is between 410 and 450. If the aggregate score is above 450, Management must determine additional mitigation strategies to reduce the score until it is the acceptable range.



# Annual Risk Assessment

Protein Industries Canada's organization-wide risks are rated in terms of their likelihood of occurrence and their impact on the organization if they occurred. A lower risk ranking indicates a better score. Mitigation strategies are developed for all moderate to high risk (yellow and red risks).

## We classify risks into five categories:

- Operational and Security;
- Compliance;
- Financial;
- Strategic; and
- Political.

**Operational and Security Risks** are those associated with the day-to-day operations of the organization, as well as risks related to security of sensitive information of Protein Industries Canada and its stakeholders.

**Compliance Risks** are those associated with operating pursuant to our Contribution Agreement, Articles of Incorporation, Bylaws, the *Canada Not for Profit Corporations Act* and any other regulatory or legal requirements.

**Financial Risks** are those associated with the required 25 per cent operational funding derived from industry, securing matching project funds from industry and providing project funds to project partners for eligible expenses.

**Strategic Risks** are those associated with ensuring our investments are aligned with our strategic plan and supporting the projects and activities with the best chance of driving the industry forward.

**Political Risks** are those associated with our relationships with all levels of government.



# Risk Ranking Framework Definitions

Risk rankings are based on the following definitions:

<b>Score of 20 to 25</b>	<ul style="list-style-type: none"> <li>Urgent management of this risk is critical to the success of Protein Industries Canada as an organization.</li> <li>Committee/Board should be engaged to guide the Senior Leadership Team.</li> <li>Significant risk mitigation strategies and improvements are required.</li> <li>Significant effort and Senior Leadership Team time and possible Board intervention is required to resolve.</li> </ul>
<b>Score of 10 to 19</b>	<ul style="list-style-type: none"> <li>Management of this risk is very important but currently not urgent. It is important to Protein Industries Canada successfully meeting its mandate.</li> <li>Committee/Board should be informed but does not need to be engaged in the resolution.</li> <li>Improving risk mitigation strategies is desired.</li> <li>Requires the time and effort of the Senior Leadership Team.</li> </ul>
<b>Score of 5 to 9</b>	<ul style="list-style-type: none"> <li>Management of this risk is important to Protein Industries Canada successfully meeting its mandate.</li> <li>Periodic reporting to the Committee/Board may be required.</li> <li>Improving risk mitigation strategies is not needed at this time.</li> <li>Senior Leadership Team should ensure management controls are in place.</li> </ul>
<b>Score of 1 to 4</b>	<ul style="list-style-type: none"> <li>Management of this risk is not material to Protein Industries Canada successfully meeting its mandate.</li> <li>Periodic reporting to the Committee/Board should only occur as part of regular reporting (for example: annually).</li> <li>Improving risk mitigation strategies is not required.</li> <li>The risk can be managed by routine controls and procedures.</li> </ul>

**Protein Industries Canada completes the annual Risk Assessment and Mitigation Plan in March of every year. A risk analysis for 2024-25 will be inserted following approval at the March 2024 board meeting.**



# Technology Leadership Program

Fiscal 2023-24 marked the first year of Protein Industries Canada's second round of Technology Leadership funding. As of Dec. 15, 2023, Protein Industries Canada had 27 projects in our pipeline, with a total value of \$113 million. Of those 27 projects, one was announced, 11 were approved and a further 15 in the development process. A further six projects were received as part of the joint call with Innovate UK, and those projects are currently in development. A change for fiscal 2023-24 was the move away from a continual intake of projects to time-bound calls. This has allowed for a timelier project development and approval process.

Other changes include an increase in the number of required collaborators in each project from two to three, and the requirement for every project to include a plan to contribute to Economic Reconciliation. Also, in 2023-24 active projects will have to complete the first annual project review. The annual project review will help ensure that milestones are being met and that expenditures are still on track as planned, as well as identification of any new risks.

For 2023-24, investments under the Fund II technology program will continue to take a value-chain approach with increased collaboration along the value chain. Continuing from Fund I, all consortia must have at least one SME as part of the project.

The project intake and selection process remains the same as previous years. Information on the process can be found at [www.proteinindustriescanada.ca/technology](http://www.proteinindustriescanada.ca/technology).

The Project Selection Committee will remain the same as previous years, with a collection of independent experts to make decisions related to program priorities. More information about the Project Selection Committee and its members can be found at [www.proteinindustriescanada.ca/technology](http://www.proteinindustriescanada.ca/technology).

## Technology Program Summary of Project Funding

Protein Industries Canada takes a value chain-based approach to innovation. This means that our investments into technology projects mirrors that of the agrifood value chain – from the lab to the consumer's fork. The new



program pillars of Genetics, Crops, Ingredients and Products were introduced in 2023-24, and will remain the same through to the end of the second mandate. These pillars will guide all Fund II technology co-investments and will frame co-investment decisions from re-allocated funds moving forward. Examples of potential innovations that complement these pillars are provided below.

Program Area	Areas of Potential Innovation Focus
<p><b>Genetics</b> Germplasm development with an aim to improve processing efficiency, quality, sensory qualities and the development of novel ingredients</p>	<ul style="list-style-type: none"> <li>• Improved co-product quality, functionality and/or nutritional profile;</li> <li>• Reduced anti-nutritional factors;</li> <li>• Improved efficiency of protein extraction and/or crop fractionation; and</li> <li>• Increased availability of supply for emerging field crops.</li> </ul>
<p><b>Crops</b> Technologies to measure and improve on-farm sustainability and information flow along the value chain</p>	<ul style="list-style-type: none"> <li>• Systems that support the measurement, verification and reporting of traceability/chain of custody, sustainability and food safety of Canadian crops and ingredients.</li> </ul>
<p><b>Ingredients</b> The development, scaling and optimization of plant-based ingredients.</p>	<ul style="list-style-type: none"> <li>• Testing and scaling of new and novel ingredient manufacturing processes;</li> <li>• Improved rates of protein extraction and nutrient density;</li> <li>• Reduced water and energy requirements in ingredient manufacturing processes;</li> <li>• Optimized ingredient manufacturing processes for Canadian crops and Canadian conditions;</li> <li>• The development of new and novel ingredients and co-products from Canadian crops; and</li> <li>• Improved processing efficiency in the manufacturing of plant-based ingredients.</li> </ul>
<p><b>Products</b> The conversion of Canadian-made ingredients and co-products into consumption-ready goods.</p>	<ul style="list-style-type: none"> <li>• The creation and commercialization of consumer-ready food products that align with consumer needs, expectations and trends, including clean-label, sustainable and nutritious products;</li> <li>• The creation and commercialization of value-added animal feed products; and</li> <li>• The creation and commercialization of new industrial bio-products derived from the co-products of protein extraction and ingredient manufacturing.</li> </ul>

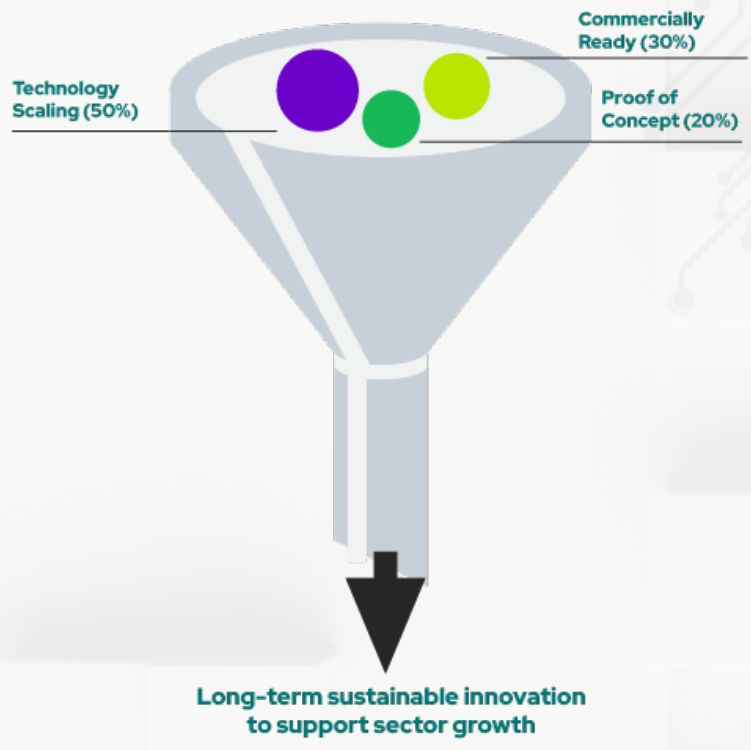




To ensure a balanced value-chain approach, Protein Industries Canada strives to have investments distributed amongst the pillars via a 15/10/50/25 percentage split.



In addition to the four areas of investment, in Fund II Protein Industries Canada will entertain proposals from across TRL levels to ensure a pipeline of projects to support innovation for the next decade.



- **Proof of Concept (20%)**  
Projects that will demonstrate feasibility at pilot scale by generating data to assess technical and economic feasibility. These technologies would be expected to be commercialized within three to five years, and have the potential to transform the sector.
- **Technology Scaling (50%)**  
Projects that will enable the first commercial deployment of a technology, enabling companies to establish a feedback loop with prospective customers, and to assess technical, economic and commercial feasibility.
- **Commercially Ready (30%)**  
Projects that will enable companies to optimize and deploy commercially viable technology for Canadian crops and conditions.



# Anticipated Results of Technology Projects

A summary of all projects can be found at <https://www.proteinindustriescanada.ca/projects>.

## Pillar Projected Outcomes

Pillar	Projected Outcomes
<b>Genetics</b>	<ul style="list-style-type: none"><li>• New varieties of protein crops that are better suited to Canadian growing conditions; and</li><li>• Commercialization of new high-protein crop genetics to allow for transition into higher value applications (ex: aquaculture or food).</li></ul>
<b>Crops</b>	<ul style="list-style-type: none"><li>• New measurement, reporting and validation standards for sustainability metrics in Canada.</li></ul>
<b>Ingredients</b>	<ul style="list-style-type: none"><li>• New product concepts that add value to co-products derived from protein extraction processes; and</li><li>• Improved functionality of ingredients through the development of new processing technologies.</li></ul>
<b>Products</b>	<ul style="list-style-type: none"><li>• Canadian-made products and Canadian IP will reach new markets, while utilizing plant-protein co-products in innovative ways.</li></ul>

## Ecosystem Development

A connected and engaged ecosystem is an integral part of Cluster development. At Protein Industries Canada, building the ecosystem happens as part of our day-to-day work and through the Capacity Building Program. Through our day-to-day work, Protein Industries Canada works to keep the ecosystem informed, create awareness of opportunities, build connections and share information.

### This includes:

- A bi-weekly newsletter to subscribers in both official languages;
- The hosting of 21 events and webinars in 2023-24;
- Working with Global Affairs Canada and the Trade Commissioner Service to create connections between Canadian companies and international companies;
- Hosting Access to Capital roundtables to introduce the capital community to the sector and remove barriers to investment;
- Sponsor and attend key industry events such as Grow Canada and the Future of Food;
- Support incoming trade missions and create networking opportunities between international and domestic companies;
- Work with organizations such as Invest in Canada to help attract new investment into Canada;
- Undertake public relation activities to increase knowledge and presence of the sector and the businesses within it;
- Make connections between Protein Industries Canada members and other organizations, including researchers, research facilities, and other potential investors; and
- Promotion of the IP Hub and Member Portal.



# Capacity Building Program

With the launch of Fund II, Protein Industries Canada adjusted its capacity building pillars to focus on eight key areas: Market Knowledge and Ecosystem Insights; Innovation Infrastructure; Access to Talent, Labour and Skills; Supportive Regulatory Framework; An Inclusive Sector that Brings Benefit to Every Canadian; Access to Capital; Sustainability; and Global Presence. Protein Industries Canada collaborates with industry to determine the areas of greatest need and to scope and submit projects that will have most impact on the ecosystem. Either Protein Industries Canada or industry may lead projects.

Protein Industries Canada issued the first call for capacity building projects expressions of interest in October 2023, for projects under the priority area of An Inclusive Sector that Brings Benefit to Every Canadian. The call resulted in the submission of seven EOIs.

More information about the capacity building stream can be found at <https://www.proteinindustriescanada.ca/capacity-building>.

Protein Industries Canada Capacity Building project selection process mirrors that of the Technology Leadership Project Selection, with an independent committee of industry experts making decisions related to project approval and investment. More information about the Project Selection Committee and its members can be found at <https://www.proteinindustriescanada.ca/capacity-building>.

## Capacity Building Program Summary of Project Funding

With a renewed focus on the eight pillars, Protein Industries Canada will continue its ecosystem-building efforts under the capacity-building stream. The goal of capacity building projects is to grow the ecosystem so the benefits of technology leadership projects are fully realized, while also bringing benefit to Canadians through more jobs and investment. The eight capacity building priorities are necessary to build a sustainable sector as reflected in *The Road to \$25 Billion*. In order to realize the opportunity presented by ingredient manufacturing and food processing, the sector must work together to attract capital to the sector, build our markets, and attract, train and retain labour and more.



Protein Industries Canada Capacity Building Program is designed to make progress in each of these areas.



### Market and Ecosystem Insights

Help project partners and the wider Canadian plant-based ecosystem identify marketing opportunities, adapt to customer needs, expand market reach and foster innovation.



### Innovation Infrastructure

Across the sector, there is a need for increased access to research and product-scaling infrastructure.



### Access to Talent, Labour and Skills

We estimate the sector needs an additional 17,000 people to achieve the goals set out in *The Road to \$25 Billion*. This demonstrates both a need and a great opportunity.



### Supportive Regulatory Framework

There is an opportunity to modernize Canada's regulatory system to support continued innovation of plant-based foods, specifically for it to be more responsive and timely and to offer harmonization of regulations with other jurisdictions.



### An Inclusive Sector that Brings Benefit to Every Canadian

Protein Industries Canada is committed to inclusion of Indigenous Peoples and new Canadians into the opportunity presented by the growth of the plant-based sector, contributing to Economic Reconciliation and the social well-being of all Canadians.



### Access to Capital

We estimate that an additional \$4 to 6 billion will need to be invested into the sector to help Canadian companies scale up their processing and manufacturing operations.



### Sustainability

Canada is known for its sustainable crop production. We need to continue to identify the right metrics and reporting to advance our sustainability claims throughout the value chain.



### Global Presence

International partners are an important part of reaching the goals of *The Road to \$25 Billion*. Protein Industries Canada will work with our federal and provincial partners to advance Canada as the preferred place to do business with and invest, while creating opportunities for our industry partners to make new connections.

## Anticipated Results of Capacity Building Projects

A summary of all previous Capacity Building Projects from Fund I can be found at <https://www.proteinindustriescanada.ca/projects>.



# Pillar Projected Outcomes

Pillar	Projected Outcomes
<b>Market Knowledge</b>	<ul style="list-style-type: none"> <li>Dissemination of new market research, including domestic and international trends; and</li> <li>Insight for environmental scans.</li> </ul>
<b>Innovation Infrastructure</b>	<ul style="list-style-type: none"> <li>Improved understanding of current infrastructure and capacity as well as future needs;</li> <li>Increased number of new operations in Canada; and</li> <li>Increased capacity in publicly funded research institutions.</li> </ul>
<b>Access to Talent, Labour and Skills</b>	<ul style="list-style-type: none"> <li>Increased collaboration with Canada’s Universities, Canada’s Polytechnic Institutions, Indigenous training institutions and a host of talent and skill-focused NGOs; and</li> <li>The development of new programs that fill the labour gap and attract highly specialized foreign talent into the sector.</li> </ul>
<b>Supportive Regulatory Framework</b>	<ul style="list-style-type: none"> <li>Increased support of regulatory modernization in the areas of protein labelling regulations for protein nutrient content claims, nomenclature and discretionary fortification of simulated plant-based meat and poultry products.</li> </ul>
<b>An Inclusive Sector that Brings Benefit to Every Canadian</b>	<ul style="list-style-type: none"> <li>Increased awareness amongst both the agrifood sector and First Nations populations about the opportunities and benefits of collaboration; and</li> <li>Training and skill development programs specific to Indigenous communities to help ensure they are aware and able to benefit from the growth of the sector.</li> </ul>
<b>Access to Capital</b>	<ul style="list-style-type: none"> <li>New connections with the capital community, to raise awareness and investment into the sector; and</li> <li>Support companies through training and development to help them become more successful in attracting capital.</li> </ul>
<b>Sustainability</b>	<ul style="list-style-type: none"> <li>Identification of metrics and measures necessary to help inform the creation of an MRV protocol.</li> </ul>
<b>Global Presence</b>	<ul style="list-style-type: none"> <li>Support of incoming and outgoing missions to help create new clients for Canadian products and attract investment into Canada; and</li> <li>Showcase Canada’s brand through domestic and international events.</li> </ul>



# Artificial Intelligence Program

In September 2022, Protein Industries Canada launched its artificial intelligence program. Under the new program, Protein Industries Canada organizes the delivery of the Government of Canada's Pan-Canadian Artificial Intelligence Strategy (PCAIS). Protein Industries Canada has \$30 million to commit to projects under the artificial intelligence program.

The project intake process for AI Projects is a dual process, with both continual intake and specific calls. In 2023-24, Protein Industries Canada issued two specific calls for AI projects. In July, a \$10 million call for food-related AI projects was issued and in November, an expanded call that encompassed the entire value chain from seed genetics to on-farm production through to ingredient manufacturing, food processing and logistics.

The project intake and selection process for AI Projects is similar to that of the technology program, with the addition of a data feasibility study to ensure companies are well-prepared to work with and develop artificial intelligence technology. Information on the process can be found at <https://www.proteinindustriescanada.ca/artificial-intelligence>.

Artificial intelligence projects are assessed for approval by an independent Project Selection Committee. More information about the Project Selection Committee and its expert members can be found at <https://www.proteinindustriescanada.ca/artificial-intelligence>.

## Artificial Intelligence Program Summary of Project Funding

Protein Industries Canada will fund projects under the artificial intelligence program according to three streams of funding: Projects, Systems and Community. These streams were developed in consultation with stakeholders, ensuring they meet the business goals of individual companies, address larger opportunities within Canada's plant-based food, feed and ingredient sector, ensure alignment with the recommended actions in *The Road to \$25 Billion*, and ensure that the benefits of AI technologies accrue to all members of society. Examples of potential innovations that complement these pillars are provided below.



Program Area	Areas of Potential Innovation Focus
<p><b>Projects</b> Help individual companies within the plant-based food, feed and ingredient ecosystem incorporate AI as a core business function</p>	<ul style="list-style-type: none"> <li>• Use AI to improve processing efficiency, reduce labour costs and improve food safety.</li> </ul>
<p><b>Systems</b> Focus on overall sector competitiveness and require multiple partners from the plant-based food, feed and ingredient ecosystem to collaborate on a common goal that benefits the members of the consortia and the entire sector</p>	<ul style="list-style-type: none"> <li>• Working within a data trust and pooling information related to the functionality, nutrition and chemical property of ingredients, the creation of a system whereby companies are creating and testing product formulations in a virtual world;</li> <li>• Ingredients being analysed for nutritional composition, allergenicity, taste and texture; and</li> <li>• Co-innovation of products based on ingredients available from different members of the system.</li> </ul>
<p><b>Community</b> Help ensure that benefits of AI application in the plant-based food space are achieving societal benefits</p>	<ul style="list-style-type: none"> <li>• Design food products that help achieve certain health outcomes or to address health concerns; and</li> <li>• Develop chain-of-custody systems to help reduce food waste and improve food security.</li> </ul>

## Anticipated Results of AI Projects

Projects under Protein Industries Canada’s artificial intelligence program continue to make their way through the application stage. In 2023 -24, three new AI projects were announced, including the Data Readiness Improvement Project (DRIP). DRIP helps companies prepare to incorporate AI into their work by providing foundational, customized AI and machine learning training for agrifood professionals with diverse backgrounds in applied research, business development and strategic leadership.

A summary of all projects can be found at <https://www.proteinindustriescanada.ca/projects>.

## Pillar Projected Outcomes

Pillar	Projected Outcomes
<p><b>Projects</b></p>	<ul style="list-style-type: none"> <li>• Employing AI in the form of imaging technology and process automation to increase automation and consistency of food safety and/or quality assurance.</li> </ul>
<p><b>System</b></p>	<ul style="list-style-type: none"> <li>• Utilizing AI to iterate new product formulations faster, in response to consumer preference and improving consumer acceptance.</li> </ul>
<p><b>Community</b></p>	<ul style="list-style-type: none"> <li>• A collaboration between national health advocacy agencies along with a number of plant-based food companies to use AI to design food products that help achieve certain health outcomes or to address health concerns.</li> </ul>





## **Protein Industries Canada**

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