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Achieving Balance:

The Future of the Environmental Farm Plan Program in Canada

*Research Report prepared for CAPI by Dr. Bronwynne Wilton,
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**Research
Report**



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A Note from CAPI

Environment Farm Plan programming has been a part of the Canadian agricultural landscape since the '90s. The global marketplace for Canada's agri-food products is becoming increasingly emphatic about the need for farmers to provide proof that their operations are implementing beneficial management practices surrounding sustainability and environmental stewardship. The Canadian Agri-Food Policy Institute (CAPI) commissioned the following paper at a time when the dawn of the next policy framework, as well as the demands of global markets, present an opportunity for lawmakers and stakeholders to assess and make changes to Canada's current EFP programming.

This report, authored by Dr. Bronwynne Wilton, Dr. Andrea Gal and Krista Kapitan of Wilton Consulting Group, provides context to Canada's current landscape of EFP programming and how it is implemented across the country. It also includes insight into the importance of EFPs, how they align with Canada's zero-emissions goals, and some recommendations for how they could be improved.

Key Takeaways

- All 10 provinces in Canada, as well as the Yukon, have developed and implemented their own EFP program reflecting the unique nature of their agricultural industries. The Northwest Territories are currently developing an EFP programming.
- Uptake of EFP programming varies across provinces and territories for several reasons, including differences in cost-share funding program structures, as well as the differences in prevailing farm types.
- The effectiveness of EFPs is hard to measure, due, in part, to the lack of harmonization, logging inconsistencies, and privacy concerns.
- The EFP program is evolving. It's delivery methods, content and focus, and staff and resources are currently in a critical stage of transition.
- The Next Policy Framework is a great opportunity to implement needed improvements to EFP programming.
- EFPs provide an opportunity for strengthening the agricultural industry's relationship with the Canadian government through their shared focus on sustainability and environmental stewardship.
- The EFP program has the capacity to continue to be the flagship agri-environmental program and education tool for farmers across Canada, helping them meet Canada's net-zero emissions goals by 2050.

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1.0 Introduction

Farmers across Canada work with either provincial and territorial ministry staff and technical experts or staff at agricultural organizations who deliver the program to complete Environmental Farm Plans (EFPs). These voluntary, educational tools are used for by producers to assess environmental risks on their farms. The general goal of EFPs is to facilitate knowledge sharing about regulatory requirements and beneficial management practices (BMPs) to promote continuous environmental improvements at the farm level. EFP programs also seek to support farmers in producing safe products, while minimizing their environmental impacts and risks. EFP programming is available in all 10 provinces, plus the Yukon; the history of EFP programming stretches back to the 1990s in Ontario. The Northwest Territories are also in the process of developing an EFP program.

At the same time, the marketplace increasingly seeks data-driven indicators of sustainability at the farm level. Key players in the supply chain are asking farmers to participate in programs to demonstrate the sustainability of their operations. An opportunity exists to better understand the role and importance of the EFP in Canada within this evolving landscape of sustainability standards.

This policy paper addresses the following key questions:

- What is the status of EFP programming across Canada?
- What is the current state of agricultural sustainability standards in terms of key trends and market access?
- What potential synergies, if any, exist between EFP programming and sustainability standards?
- How can future EFP programming help meet market demands for environmental sustainability information?

This policy paper was developed through engagement with Canadian agricultural industry stakeholders, including government officials, EFP program delivery agents, and representatives of commodity organizations. Stakeholders participated in one-on-one interviews and a workshop.

The report contains the following sections:

- Context
- Summary of Engagement
- Recommendations and Future Pathways

The aims of this policy paper are three-fold:

- 1) To provide agricultural stakeholders with insights for the future of EFP programming across Canada
- 2) To inform consultations for the Next Agricultural Policy Framework (NPF), which is a five-year (2023–28) federal-provincial-territorial investment in the Canadian agricultural and agri-food industries.¹
- 3) To understand how the EFP program can be leveraged to provide market assurance of sustainability at the farm level.

¹ Government of Canada. (June 2021.) "Share ideas: Next Agricultural Policy Framework." Retrieved from: <https://agriculture.canada.ca/en/about-our-department/transparency-and-corporate-reporting/public-opinion-research-and-consultations/share-ideas-next-agricultural-policy-framework>.

2.0 Current Context of Environmental Farm Plan Programming Across Canada

Environmental Farm Plan programming began in Ontario “through a consensus-based process” and a pilot project in 1993.² Today, each of the 10 provinces in Canada, as well as the Yukon, has developed its own EFP program to reflect the unique nature of the agricultural industry in its province or territory, and to

coincide with provincial/territorial environmental and agricultural regulations. Quebec and the Atlantic provinces developed their programs in the late 1990s. Provinces in Western Canada implemented EFP programming in the early 2000s and the Yukon launched its program in 2005. The Northwest Territories are in the

process of developing their EFP program. The EFP is completed through an electronic or hard copy workbook.³ The EFP enables each farmer to identify and assess their individual farm’s environmental risks, and to develop action plans to manage, mitigate or address those risks.

The Process for Developing Individual Environmental Farm Plans

As each province and territory has developed its own approach to EFP programming, the process a farmer goes through to develop an EFP varies depending on the province that they farm in. Requirements for EFP renewals also vary by province depending how long it has been since a farmer last completed an EFP. Generally, however, the process will involve some combination of the steps below. Once a farmer completes their EFP, they can then apply for cost-shared funding to implement BMPs recommended through their action plans.



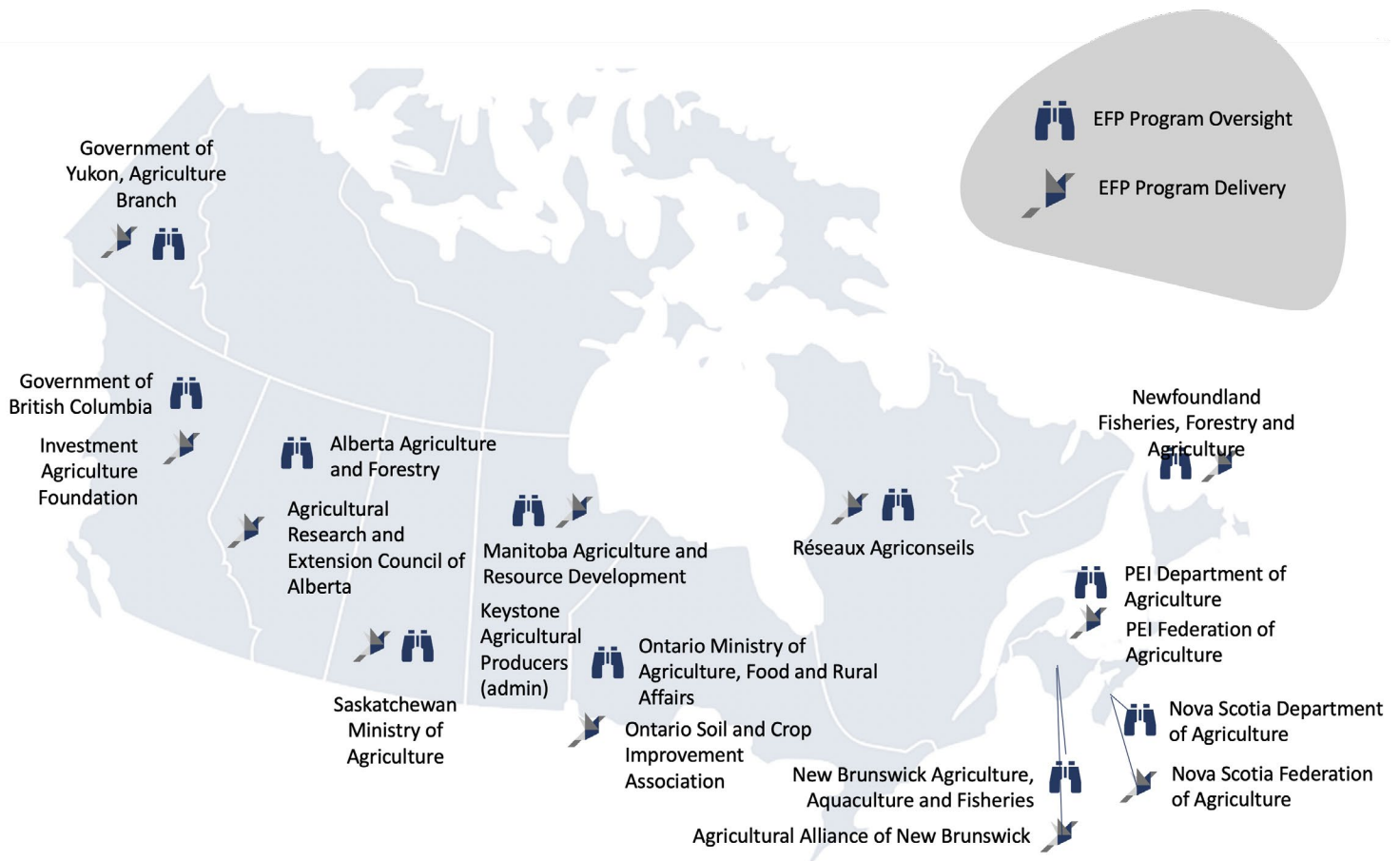
² Ontario Ministry of Agriculture, Food and Rural Affairs. (Feb. 2021.) “Canada-Ontario Environmental Farm Plan.” Retrieved from: <http://www.omafr.gov.on.ca/english/environment/efp/efp.htm#:~:text=History%20%26%20Funding,support%20was%20provided%20by%20OMAFRA%20>

³ The availability of an online workbook varies by province/territory.

Delivery and Program Oversight

How the EFP programming is overseen and delivered varies across the provinces and the Yukon. In some provinces and territories, one government ministry, usually the ministry of agriculture, handles both program oversight and delivery. The Yukon, Saskatchewan, Quebec and New Brunswick currently take this approach. In the remaining provinces, a government ministry manages program oversight, while a third-party delivery agent handles program delivery.

Figure 1. EFP program oversight and delivery by province and territory



Funding Context

Since EFP programs were launched, they have generally been funded through a collaboration between federal, provincial and territorial (FPT) governments. For example, when the EFP was launched in Ontario, it was jointly funded with Agriculture and Agri-Food Canada under the Canada-Ontario Green Plan.⁴ Today, EFP programs continue to be funded through FPT investments under the Canadian Agricultural Partnership (the Partnership), which is a \$3-billion five-year investment (2018-23). In total, \$2 billion is devoted to FPT cost-share initiatives, which include business risk management programs and EFP programs.⁵

The Partnership ends on March 31, 2023, and consultations are underway on the Next Agricultural Policy Framework (NPF), which will span 2023-28. The Guelph Statement identifies the priorities, guiding principles, and focus areas for the NPF.

In the Prime Minister's December 2021 Mandate Letter to the Honourable Marie-Claude Bibeau, Canada's Minister of Agriculture and Agri-food, the Minister was tasked with:⁶

- "Increasing support to farmers to develop and adopt agricultural management practices to reduce emissions, store carbon in healthy soil and enhance resiliency"
- "Tripling funding for clean tech on farms, including for renewable energy, precision agriculture and energy efficiency"
- "Working with farmers and stakeholders to reduce methane and fertilizer emissions in the agricultural sector"

This focus on reducing the agricultural industry's environmental footprint and greenhouse gas emissions offers opportunities for alignment with the EFP's focus on developing action plans to mitigate environmental risks.

The Guelph Statement: A Vision to 2028

"Canada is recognized as a world leader in sustainable agriculture and agri-food production and drives forward to 2028 from a solid foundation of regional strengths and diversity, as well as the strong leadership of the Provinces and Territories, in order to rise to the climate change challenge, to expand new markets and trade while meeting the expectations of consumers, and to feed Canadians and a growing global population."

— **Government of Canada**

⁴ See Ontario Ministry of Agriculture, Food and Rural Affairs. (Feb. 2021). "Canada-Ontario Environmental Farm Plan." Retrieved from: <http://www.omafra.gov.on.ca/english/environment/efp/efp.htm#:~:text=History%20%26%20Funding, support%20was%20provided%20by%20OMAFRA%20>. And Smith et al. (2020). "Canada's environmental farm plan: Evaluating implementation, use of services, and the influence of social factors." Canadian Center of Science and Education. 9:4. ISSN 1927-050X.

⁵ The business risk management (BRM) programs are AgriStability, AgriInvest, AgriInsurance, AgriRecovery, and the Advance Payments Program. For more information on these BRM programs, please see Government of Canada. (January 2022). "Business risk management programs." Retrieved from: <https://agriculture.canada.ca/en/agricultural-programs-and-services/business-risk-management-programs>.

⁶ Prime Minister of Canada. (December 2021). "Minister of Agriculture and Agri-Food Mandate Letter." Retrieved from: <https://pm.gc.ca/en/mandate-letters/2021/12/16/minister-agriculture-and-agri-food-mandate-letter>.

The current system under which the EFP programming is funded has both benefits and challenges. Table 1 presents a summary of what we heard during interviews with agricultural industry stakeholders; this list is not exhaustive.

Table 1. Benefits and drawbacks of the current EFP funding system

BENEFITS	CHALLENGES
<ul style="list-style-type: none"> • EFP programs account for regional variation between agricultural systems. • Provinces and Territories can design oversight and delivery processes in a way that fosters trust at the farm level. • The funding structure for EFP programming has been broadly supported by federal and provincial governments since 2003 through federal-provincial-territorial cost-share programming. 	<ul style="list-style-type: none"> • Lack of federal oversight on development and delivery mechanisms has enabled a system where harmonization, coordination and standardization across provinces is challenging. • Environmental BMP funding is “overshadowed” by business risk management programming, which is legislated programming. • Transfer payment agreements between federal and provincial/territorial governments (and, in some cases, third-party delivery/review agencies) can take time to finalize and cause delays in programming availability (i.e., cash for continuous programming is less “liquid”). As EFPs become more of a tool for sustainability assurance in the marketplace, this time lag may become increasingly challenging for farmers. • Uncertainty exists about whether EFP programming will continue to receive funding under each new federal-provincial-territorial agricultural policy framework.

Uptake and Impact

In 2017, Statistics Canada estimated that approximately 40% of Canada's farms have a completed EFP. Of those farms with an EFP, 39% developed their EFP less than two years prior to 2017.⁷ Figures on EFP uptake are released periodically every five years, with the release of Statistics Canada's Farm Management Survey. This survey focuses on seven key sectors of agricultural production in Canada: beef, dairy, field crops, forage crops, pigs, poultry, and fruit, vegetables, berries and nut production. The survey excludes small operations with annual agricultural sales of under \$10,000.⁸ The 40% of farms with EFPs, then, represent an important segment of farms but not all farm operations in Canada.

Table 2. Percentage of farms with a developed EFP, by province.⁹

Province	Percentage of farms with an EFP developed (2017)	Percentage of farms with an EFP developed less than two years ago (as of 2017)
Newfoundland and Labrador	/	/
Prince Edward Island	66%	38%
Nova Scotia	63%	37%
New Brunswick	74%	31%
Quebec	81%	82%
Ontario	46%	27%
Manitoba	28%	18%
Saskatchewan	28%	11%
Alberta	25%	17%
British Columbia	28%	34%
The Yukon	55% ¹⁰	/

A recent study explored motivation and barriers to implementing an EFP in Ontario, the costs and amount of time needed to implement EFP action plans, and the social factors that influence participation.¹¹ The researchers based their work on a 2010–11 survey of 189 Ontario farmers. The researchers found that an average of 83 individual activities were identified in farmers' EFP action plans. On average, farmers were "in the process of implementing 67.5% of their EFP action plans." This percentage was a significant increase in the share of implementation compared to a survey completed in 1999.

⁷ The definition of a current EFP varies by province and territory; thus, the percentage of farms with an EFP developed does not necessarily equate to the percentage of farms with a current EFP.

⁸ Statistics Canada developed this survey "to be representative of 81% of the Canadian agricultural production in [these] seven specific production subsectors." See Statistics Canada. (April 2019). The Daily: Table 5. Farms with a formal Environmental Farm Plan (EFP) Canada and Provinces. Retrieved from: <https://www150.statcan.gc.ca/n1/daily-quotidien/190426/t005b-eng.htm>. And Statistics Canada. (April 2019). "Farm Management Survey (FMS)." Retrieved from: <https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&Id=425075>.

⁹ Statistics Canada. (December 2019.) Table 32-10-0205-01 Farms with a formal Environmental Farm Plan. Retrieved from: <https://www150.statcan.gc.ca/t1/tbl/en/tv.action?pid=3210020501>. And Statistics Canada. (April 2019). The Daily: Table 5. Farms with a formal Environmental Farm Plan (EFP) Canada and Provinces. Retrieved from: <https://www150.statcan.gc.ca/n1/daily-quotidien/190426/t005b-eng.htm>.

¹⁰ Source: Personal communication. (2022). Randy Lamb, Agrologist, Agriculture Branch, Energy, Mines & Resources, Government of Yukon.

¹¹ Smith et al. (2020). "Canada's environmental farm plan: Evaluating implementation, use of services, and the influence of social factors." Canadian Center of Science and Education. 9:4. ISSN 1927-050X.



A 2020 survey in Alberta found most farmer-respondents (64%) who had completed an EFP made a few changes in their operations as a result; another almost fifth (18%) said they made several changes.¹² In total, 13% of respondents had not incorporated any changes. This

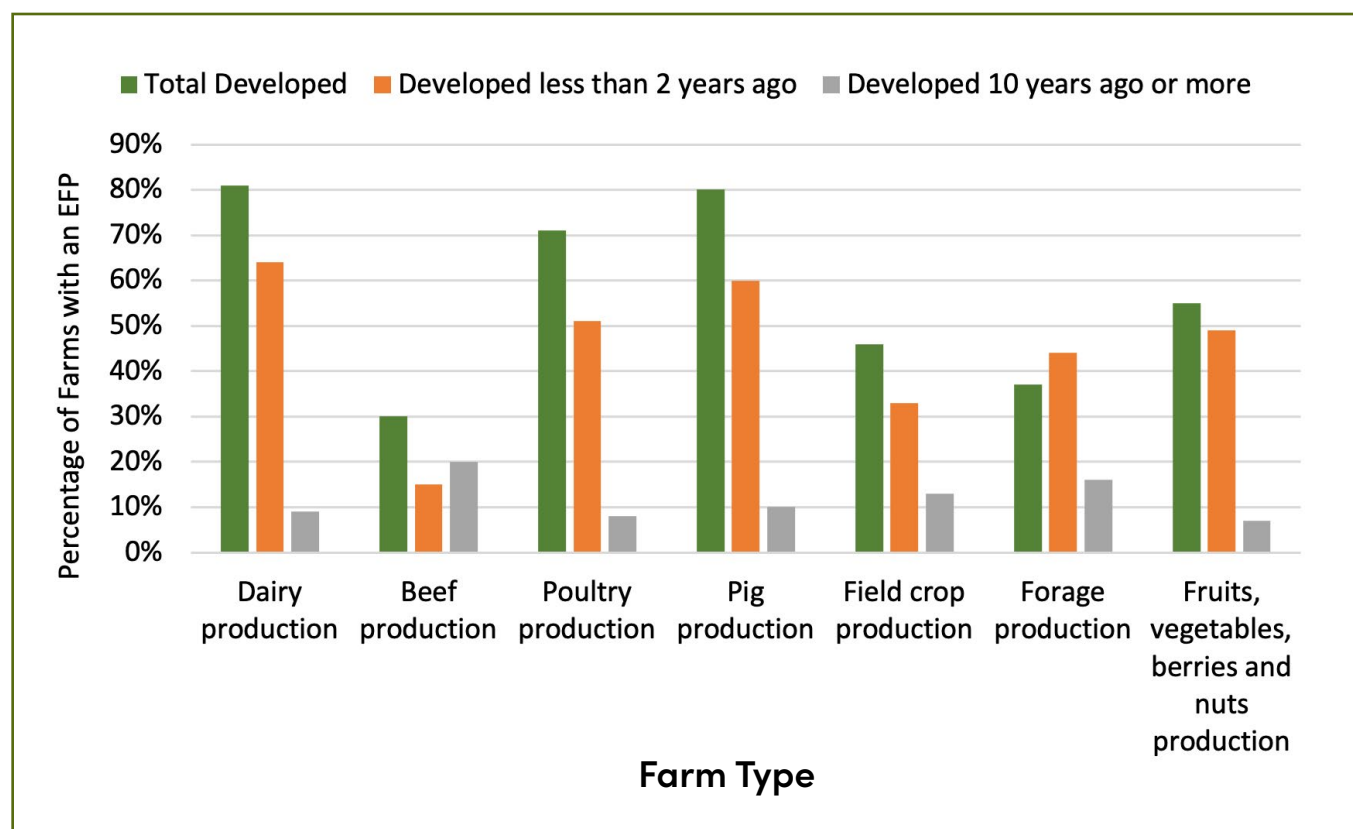
response could be attributed to the fact the farmers may have recently completed their EFPs, so did not yet have time to implement their action plans, the researchers said.

Uptake varies across provinces and territories for several reasons, including differences in cost-share

funding program structures, as well as the differences in prevailing farm types.

EFP uptake is particularly strong within the dairy, poultry, and pork sectors. (See Figure 2.)

Figure 2. Percentage of farms with an EFP by farm type. Source: Statistics Canada. Table 32-10-0205-02 Farms with a formal Environmental Farm Plan, and when it was developed, by farm production type



¹² See Sven Anders, Peter Boxall, Sarah Van Wyngaarden. (2021.) The 2021 Environmentally Sustainable Agriculture Tracking Survey, p. 42.



Several reasons help to explain why uptake varies across farm types:

- Different sectors face varying types of environmental risk
- Sectors where farms are more commonly larger in size (i.e., field crop production) may not be as incentivized to participate in cost-share funding for BMP projects where a completed EFP is an eligibility requirement. For example, if the available cost-share funding is perceived as less valuable than the time required to complete an EFP or implement a project, participation in the EFP program may not be as popular.
- All Canadian dairy farmers are required to have an up-to-date EFP as part of the proAction program

Individual motivations also influence EFP uptake. Producers have differing levels of awareness of their environmental risks, and want to improve their knowledge and address these risks. Some producers have a sincere interest in stewardship and improving their operations for the next generation. Some are attracted by the opportunity to apply for cost-share funding, too.¹³

Although statistics are available on the number of farms with an EFP, and more regional studies provide some information, very little data measures the impact of EFP programs due to challenges. These challenges include:

- The need for strategies to aggregate farm-level BMP data to protect the privacy of individual operations.
- Changes and/or improvements in areas of environmental risks between EFP renewals are not always measured or logged systematically.
- Canada does not have a “baseline” standard for EFP programming data collection in each province or territory; the current approach to programming hinders national standardization in data collection.
- A standardized method or set of indicators for measuring the impact of implementing BMPs does not exist, and research/understanding in this space is constantly evolving.

¹³ See Sven Anders, Peter Boxall, Sarah Van Wyngaarden. (2021.) The 2021 Environmentally Sustainable Agriculture Tracking Survey, p. 42.

3.0 Summary of Engagement

From February to April 2022, Wilton Consulting Group held 33 interviews with staff from EFP delivery organizations, provincial and territorial agricultural ministries, and representatives of commodity organizations.

On March 24, 2022, Wilton Consulting Group held a workshop with 30 EFP program and policy staff from across Canada. The two-hour workshop challenged EFP program and policy staff to think about opportunities for the EFP program and to share insights on:

- Impacts of the EFP program in recent years
- Barriers and potential solutions to EFP delivery and oversight
- Key information for policymakers leading into the consultations on the Next Agricultural Policy Framework

Together, the insights gathered through interviews and the workshop are representative of every province and territory with an EFP program in Canada.

What did we Learn?

THE EFP PROGRAM IS CANADA'S FLAGSHIP AGRICULTURAL EXTENSION PROGRAM FOR ENVIRONMENTAL EDUCATION

The importance of the EFP as an educational tool for farmers to learn about agri-environmental issues cannot be overstated. The long-standing support for the EFP program across the country is a testament to the program's popularity amongst Canadian farmers. Since the early 1990s, the program has gradually gained traction across Canada, drawing the interests of policymakers, farmers, agronomists, and extension staff nationally.

"In Alberta, the EFP is a proven tool, industry accepted, and industry owned – they can direct where it goes in the future. It is well trusted."

— Provincial Agriculture Ministry representative

The EFP program is such a staple, in fact, that many individuals involved in its delivery and oversight would like to see the program become core funded.

"(There) shouldn't be question if there will be an EFP program under the [Next Agricultural Policy Framework]. The EFP is fundamental to the work we do across Canada. It is absolutely a foundation piece. ... If we didn't have an EFP program, we wouldn't have supports for farmers for agri-environmental issues on the farm."

— Provincial Agriculture Ministry representative

The EFP is a prominent program addressing agri-environmental considerations, and the environment and climate change continue to be priorities for FPT Agriculture Ministers as per the Guelph statement. As a result, important opportunities exist to enable the EFP to continue to gain momentum through Canada's Next Agricultural Policy Framework.



THE EFP PROGRAM IS IN A STATE OF EVOLUTION

The EFP program is in a critical stage of transition. The EFP program is evolving in three main ways:

1. *Delivery Methods*
2. *Content and Focus*
3. *Staff and Resources*

Each of these factors is discussed in further detail below.

1. Delivery

The way the EFP program is delivered has always been flexible to change based on provincial/territorial needs, allowing the provinces and territories to find pathways that works for their farmers. Whether farmers work with third-party organizations or agricultural ministry representatives has been thoughtfully considered across Canada to ensure farmers can use the EFP program in confidence to learn about environmental risk on their farms. For example, in Nova Scotia, EFP Coordinators with the Nova Scotia Federation of Agriculture conduct farm visits and ask farmers a series of questions about their operations and production practices. In Alberta, the EFP workbook is entirely virtual and facilitated by the Agricultural Research and Extension Council of Alberta. In Ontario, farmers complete their EFPs with the Ontario Soil and Crop Improvement Association (OSCIA) by attending two EFP workshops and completing worksheets in a hard copy workbook. OSCIA also offers a one-day renewal workshop, or an online renewal option. EFP delivery methods must continuously evolve to meet modern industry needs.

While delivery methods vary across the country, the transition from a paper based EFP workbook to a mostly virtual experience is a key trend. The COVID-19 pandemic accelerated a transition from in-person workshops and meetings towards virtual workshops and phone interviews. In larger provinces, in-person workshops have become less feasible with many farmers participating in virtually led educational sessions. In several smaller provinces, in-person meetings and farm visits have been maintained as much as possible, but virtual offerings are also provided. The transition from hard-copy workbook to a virtual EFP can be a challenge from a cost and logistics perspective. Gaps in rural internet can also pose difficulties. Flexibility in delivery options during this transition, and one-on-one support where needed, will be key in ensuring success.

Access to BMP funding has traditionally been the “carrot” for most provincial EFP programs. However, the use of the EFP as a mandatory requirement to access cost-share funding to implement BMPs can be problematic. Provincial governments that administer cost-share funding cannot see detailed EFP information due to data confidentiality protections. As a result, the requirement to have an EFP to access cost-share funding can be perceived as simply a “box-checking” exercise for farmers to access cost-share funds. Requiring an EFP to access this funding can undermine the educational nature of the program.

At the same time, EFP stakeholders recognize the value of requiring farmers to have current EFPs to access cost-share funds because this requirement is another method to attract participation in the EFP program. To ensure this tactic is effective, the cost-share funding must be robust enough to incentivize the time investment in the EFP program. To add another layer of complexity, what constitutes a “robust” cost-share structure varies depending on farm type and size.

As part of market access initiatives, the following industry groups use the EFP to show demonstrated work towards environmental outcomes:

- Field peas in Manitoba
- All Canadian dairy farms
- Malt and barley crops in Alberta
- All Canadian potatoes sold to McCain



"If you want to see uptake, you need to think about incentives and incentive structures for producers. Think about trade-offs in terms of paperwork for the cost-share programming and how much of an incentive that will be. If you want it to be more of a market pull, you need to figure out how to [reduce] government red tape so [EFP programming] can be delivered efficiently and effectively – and evolve as industry evolves."

— EFP Delivery Organization representative

In some provinces, the EFP program is used to help farmers meet market demands for assurance of environmental sustainability practices at the farm level.

The future of the EFP program must include thoughtful consideration of how to balance being market-driven and educational, while enabling access to BMP funding too.

The proAction program, which is a national quality assurance program for Canadian dairy farms, requires all Canadian dairy producers to provide proof of completion of an EFP. Producers must keep their EFP up to date, too.

Key facts:

- Prior to implementing the requirement in 2021, a high percentage of dairy farmers across Canada already had EFPs.
- Dairy Farmers of Canada gave their farmers four years of notice prior to enforcing the EFP requirement.
- Dairy farmers must show their proAction auditors their EFP certificate of completion; Dairy Farmers of Canada does not collect information about individual or aggregated EFPs.



2. Content and Focus

Between the mid-1990s and the early 2000s, the EFP was almost exclusively used as an educational tool and prerequisite for environmental incentive programs. Since this time, the EFP's purpose has expanded. Today, industry groups are using the EFP to enable farmers to demonstrate efforts to improve their environmental sustainability. For example, Dairy Farmers of Canada's proAction program requires all Canadian dairy farmers to have a current EFP for their farms. In some provinces, proof of participation in the EFP program is used for marketing direct to consumers to showcase efforts to improve the local environment. For example, in Newfoundland, farmers who sell directly to consumers use their EFP signs to promote their farms as environmentally sustainable. This promotion can be effective for direct-to-consumer marketing. For other downstream buyers – such as processors and retailers – ways to validate/verify EFP participation and action plan implementation may be necessary for future market access.

An opportunity exists to continue to evolve and diversify EFP content, so the program is applicable across different farm types and sizes. For example, beekeeping operations and maple syrup farms may not see relevant content for them within existing EFP program content. An effort should be made, too, to enable participation across different farm sizes ranging from hobby farms to smaller market gardens and larger commercial operations. The future of EFP programming could also include the urban agriculture sector.

In recent years, EFP content has evolved to include new topics and technologies to improve its value for farmers:

- Manitoba has built a Greenhouse Gas (GHG) emission tool into its online EFP that allows farmers to estimate the GHG emissions from their operations. Future development will allow farmers to assess the impact of various practice changes on these emissions.
- Alberta has a Habitat Management Assessment Tool built into its online EFP program where farmers can enter information about their farms' habitat features. Then, users receive information about potential species at risk that could inhabit their properties, stewardship opportunities, and BMPs to enhance habitat for each species.
- Prince Edward Island's EFP program works with an independent delivery agent and uses GIS Mapping software to pinpoint opportunities for farmers to address environmental risks based on the topography of their farms.

3. Staff

As the EFP program has evolved over time, so have the staff responsible for its oversight and delivery. As staff change, institutional knowledge on the history of the EFP program must be passed on effectively. Cuts to extension programming have undermined the "people power" necessary to deliver such an educational program for farmers.^{14,15,16} Unique solutions will be required to pave a strong path forward.

¹⁴ Simes, J. (March 5, 2020). Alberta budget means more cuts for agriculture. *The Western Producer*.

¹⁵ Milburn, L-A. S., Mulley, S.J., and C. Kline. (2010). The end of the beginning and the beginning of the end: The decline of public agricultural extension in Ontario. *Journal of Extension*: 48(6).

¹⁶ Dawkins, J. (January 10, 2021). Nat'l farmers union expresses concern over 'drastic' cuts to provincial agriculture services. *The Winnipeg Sun*.

REGIONAL SPECIFICITY IS KEY TO SUCCESS

As Canada has over 189,874 farms, the agricultural industry is diverse.¹⁷ Farmers produce many different crops, livestock and poultry, and the most important commodities produced vary by province and territory. In the Yukon and Northwest Territories, for example, farmers commonly grow hay and oats, raise poultry, and produce eggs.¹⁸ In Nova Scotia, in contrast, farmers commonly produce milk, fruits and vegetables.¹⁹ In the Prairies, farmers commonly raise cattle, and grow canola and wheat. Significant diversity exists within each province and territory, too, based on differences in soil types and local climates; in Ontario, for example, farmers produce 200 different crops, livestock, and poultry.²⁰

Given this diversity, a one-size-fits-all approach to education and BMPs to mitigate on-farm environmental risks is not practical; the development and use of unique EFP workbooks for each province and territory is a key strength of the program.

Provincial, territorial and federal governments have shared jurisdiction over issues related to agriculture and the environment.²¹ Given the differences in agricultural and environmental regulations between provinces and territories, it is logical for agri-environmental programming to be developed within each province and territory. This way, the content and approach to educational offerings reflects local conditions and common practices.

Each province and territory have also created and refined their delivery mechanisms to foster trust between farmers and delivery agencies. This trust is crucial to enabling meaningful conversations in the assessment of risks and the creation of action plans that ultimately lead to impactful environmental outcomes at the farm level.

"A long-term trust exists between farmers in the province and the [delivery agent]. In general, farmers trust us to keep their information confidential, so they feel freer to be honest with their challenges on farm and environmental risks."

— EFP Delivery Organization representative

As the agricultural industry as a whole works to reduce greenhouse gas emissions and adapt to climate change, local and regional knowledge and BMPs will continue to be critical. Climate models show how the impacts of climate change, both in terms of temperature changes and changes in precipitation patterns, will vary across the country.²² EFP programming must remain regionally specific and become nimble to best help farmers mitigate, and adapt to, environmental risks resulting from climate change. Any programming related to climate change under the NPF must be broad and flexible enough to be adapted to local conditions.

EFP programming must remain regionally specific and become nimble to best help farmers mitigate, and adapt to, environmental risks resulting from climate change.

However, while the regional specificity of the EFP is a core strength of the programming, it also poses some challenges at the national level; EFP programming lacks a clear framework for collecting and communicating aggregated on-farm environmental data. Current data collection focuses on the number of completed EFPs and the number of agri-environmental projects funded under the Partnership. Under the Next Policy Framework, an opportunity exists to identify the key types of data to collect across the country, and to develop a communications plan to share the incremental improvements underway on Canadian farms through EFP programming. A common data collection strategy must be developed to gather key information for broader industry initiatives while upholding farmers' trust, which is crucial to the continued success of the EFP program.

¹⁷ Statistics Canada (2022), Census of Agriculture 2021. Retrieved from: The Daily – Canada's 2021 Census of Agriculture: A story about the transformation of the agriculture industry and adaptiveness of Canadian farmers ([statcan.gc.ca](https://www150.statcan.gc.ca/n1/pub/95-640-x/2016001/article/14810-eng.htm))

¹⁸ Statistics Canada. (May 2017). "Yukon and the Northwest Territories agricultural trends." Retrieved from: <https://www150.statcan.gc.ca/n1/pub/95-640-x/2016001/article/14810-eng.htm>.

¹⁹ Government of Canada. (November 2021). "Overview of Canada's agriculture and agri-food sector." Retrieved from: <https://agriculture.canada.ca/en/canadas-agriculture-sectors/overview-canadas-agriculture-and-agri-food-sector>.

²⁰ Ontario Federation of Agriculture. (2022). "The Facts About Our Food." Retrieved from: <https://homegrown.ofa.on.ca/facts/>.

²¹ Government of Canada. (October 2021). "The constitutional distribution of legislative powers." Retrieved from: <https://www.canada.ca/en/intergovernmental-affairs/services/federation/distribution-legislative-powers.html>.

²² Climate Atlas of Canada. (2019). "Agriculture and Climate Change." Retrieved from: <https://climateatlas.ca/agriculture-and-climate-change>.

4.0 Recommendations and Future Pathways

4.1 RECOMMENDATIONS

The EFP is Canada's flagship program for agricultural extension in environmental risk assessment. However, the program is in a critical state of evolution to facilitate market access and showcase efforts at the farm level to care for the environment. An opportunity also exists to revitalize the EFP program to tap into its full potential and streamline agri-environmental programming for Canadian farmers. The actioning of five key recommendations can help to ensure the EFP program continues to meet industry needs as knowledge of agri-environmental BMPs continues to evolve. As the recommendations show, the EFP program should leverage its long-standing strengths while realizing new opportunities to extend the reach and application of this program.

1. Formalize the National Environmental Farm Plan Group through the creation of a National Environmental Farm Plan (NEFP) Alliance.

Why?

Existing members of the NEFP group highlight the value in meeting every other month. Stakeholders in the agri-food sector with an interest in environmental sustainability at the farm level often inquire about the status of this group. By formalizing this group into an NEFP Alliance, the EFP program would have more visibility and sector stakeholders would have a place to go for discussions about agriculture and the environment. The purpose of this group can be five-fold:

- Serve as a venue to share knowledge (i.e., a Community of Practice) amongst EFP program stakeholders. Members can share updates on EFP initiatives and opportunities for new efficiencies/tools within the program.
- Act as a point-of-entry for sector groups to discuss opportunities for meeting environmental sustainability topics for sustainability assurance in the marketplace.
- Reduce duplication and inefficiencies by collaborating on research and relationship building between EFP program stakeholders, academia, and other industry groups.
- Share a cohesive story about the importance of the EFP program related to agricultural extension and on-farm environmental outcomes across Canada.
- Collaborate to develop strong and cohesive messaging for discussions with the federal government to negotiate funding structures for EFP programming, etc.

What could it look like?

The NEFP Alliance could continue to meet once every other month to share knowledge. One meeting annually could be dedicated to sharing updates with Agriculture and Agri-Food Canada and other stakeholders in the agricultural environmental sustainability space (e.g., proAction, Farmers for Climate Solutions). The NEFP Alliance could also collaborate on the activities suggested in Recommendation 4.

Key success factors:

- A secretariat to organize meeting logistics including setting agendas, coordinating with external invitees, and taking and distributing minutes.
- A clear and concise terms of reference for Alliance members.

2. Core fund the EFP program.

Why?

After almost 30 years, the EFP continues to be a successful program. Far-reaching support for it exists among federal and provincial governments, industry organizations and commodity groups.

The EFP program is a unique educational program that could be used as a market access tool for farmers. Given past dramatic cuts in extension services in Canadian agriculture, we must recognize the continued importance of the EFP program. We also must solidify its role as a tool for farmers to learn about agri-environmental BMPs all while also enabling it to reach its full potential as a market access tool.

It has become challenging for EFP program stakeholders to make commitments until cyclical policy frameworks are in place, leading to ebbs and flows in EFP activity. Misalignment between funding agreements and the growing season can curtail farmer participation in the EFP program. Traditional “stop-start” patterns of programming that run alongside fiscally based funding agreements impede the EFP from reaching its full potential.

Key success factors:

- Incorporating EFP programming into core funding should not come at the expense of other agri-food sector programming.
- Thoughtful engagement with EFP program stakeholders across Canada to propose unique solutions.
- Piloting new approaches with delivery agencies.

3. Integrate other environmental sustainability program and standards content into the EFP program.

Why?

Buyers increasingly seek evidence of environmentally sustainable production practices, and an array of sustainability programs and standards exist. Ultimately, farmers will have choices to make about where their time is most effectively spent. If farmers choose to participate in less rigorous programs, a risk exists of undercutting good stories about Canadian producers’ efforts to improve their environmental sustainability.

As organizations in the Canadian agricultural industry work to implement commodity-based sustainability initiatives, the EFP can play a greater role in demonstrating environmental efforts at the farm level. The EFP should be benchmarked to industry programs to demonstrate alignment. Then, stakeholders involved in EFP programming and commodity-based sustainability efforts should collaborate to ensure the balancing of the EFP’s strong agri-environmental educational opportunities with sustainability initiatives’ needs for verification.

The implementation of this recommendation would work best alongside the implementation of recommendation (4) below. This way, stakeholders can ensure the proper data is collected through EFP programming across Canada to provide the robust evidence about environmental sustainability that the industry seeks.

What could it look like?

Several industry initiatives already tap into the EFP program to provide assurance of environmental action at the farm level; other initiatives could build on the successes and lessons learned through these existing efforts. The National Environmental Farm Plan Alliance can serve as a sounding board for sector groups looking to help their farmers show evidence of good environmental practices.

Key success factors:

- EFP must stay relevant and modern to meet the needs of both farmers and buyers – this means virtual and hybrid delivery options should be available and cross compliance with BMP cost-share incentives must be substantial enough to incentivize participation.
- Collaboration between the National Environmental Farm Plan Alliance and agricultural industry organizations.
- Engagement with farmers to better understand their perspectives on the opportunities and challenges for integrating other industry initiatives with the EFP.

4. Develop a national framework to harmonize EFP programming and collection of key data.

Why?

Regional specificity is integral to the success of the EFP program; a one-size-fits-all EFP program would not work for the diversity of the Canadian agricultural industry. At the same time, however, a national framework could help to strengthen the program.

A framework harmonizing EFP programming can:

- Provide a clear approach to EFP data collection that tells us more about EFP uptake and impact across Canada
- Open opportunities for alignment with international market assurance programs, which often have clear guidelines for validation, for example.
- Enable Canadian agricultural organizations to tap into the EFP program to help tell Canada's agri-food sustainability story, both nationally and across provincial borders (i.e., in terms of ecosystems or landscapes).
- Create a level playing field for the provinces and territories to participate in larger-scale initiatives, like carbon markets.

As a range of stakeholders are involved in program oversight and program delivery in each province and territory, the key decision makers must be at the table and committed to this work.

Otherwise, as market assurance programs seek to ensure their approach is consistent across the country, they may resort to mandating the minimum requirements found in any single province or territory, which can "dilute" the strength of the EFP requirement.

What could it look like?

The creation of a national framework could harmonize both logistical and technical elements of EFP programs.

Logistical elements that may be harmonized:

- How frequently a farmer must renew their EFP (e.g., every five years)
- How EFPs are validated (e.g., by an agrologist, by a program delivery staff member, etc.)
- The availability of online EFP workbooks and workshops (where appropriate)
- How EFP data is captured to measure uptake and impact (e.g., collecting information about the share of farm production, or acreage, that is covered under the EFP program)

Technical elements that may be harmonized:

- The format of EFP action plans provided to farmers
- The baseline topic areas included in an EFP program (e.g., nutrient management, soil health, GHG emissions)
- Use of innovative tools and add-ons

Key Success Factors:

- Collaborate with the Canadian Agri-food Sustainability Initiative (CASI) and the National Index on Agri-food Performance to ensure the Framework aligns with trends in agri-food sustainability assurance programming and data aggregation.
- Develop a timeline and critical path forward; developing a framework for EFP data aggregation will not happen overnight, consensus building and collaboration between EFP program stakeholders will be crucial.
- Engage with farmers to understand their concerns about data privacy, and develop a data aggregation system and communications materials to alleviate these concerns.

5. Incorporate a climate change mitigation and adaptation lens into EFP programming.

Why?

The Canadian agricultural industry is impacted by the changing climate and extreme weather events, and farmers seek methods to mitigate risks in their operations. Farmers also have a role to play in helping to reduce GHG emissions and in sequestering carbon through BMPs.

How?

As oversight bodies and delivery agents collaborate to update provincial and territorial EFP workbooks, they should incorporate a climate change mitigation and adaptation lens to help farmers learn about the latest research and opportunities in this field. As with the EFP's agri-environmental education more generally, this work would be win-win; farmers could realize benefits for their operations, as well as for the environment more generally. Farmers could also help the federal government to realize its "commitment to achieve net-zero emissions by 2050."²³

What could it look like?

Rather than incorporating a section or chapter based on climate change mitigation and adaptation into EFP workbooks, oversight bodies and delivery agents should include this content where relevant throughout the entire workbook. Oversight bodies and delivery agents could, for example, include specific callouts highlighting BMPs that reduce GHG emissions and sequester carbon. They could also include an icon to show that a given risk assessment question relates to climate change mitigation and adaptation. Some workbooks for example, use bolded and italicized type to indicate conditions that contravene provincial legislation, and a fish icon to indicate conditions that contravene the federal Fisheries Act.

The NEFP Alliance could develop a working group to share lessons learned in the journey to incorporating climate change mitigation and adaptation education and BMPs into provincial and territorial workbooks.

The EFP program could be enhanced to align with other relevant programs, such as the On-Farm Climate Action Fund. This Fund aims to support farmers in the adoption of nitrogen management, cover cropping, and rotational grazing BMPs to sequester carbon and reduce GHG emissions.²⁴

Provinces and territories could also collaborate to create tools and resources that serve overarching industry needs while reflecting local/regional conditions. For example, an opportunity exists to leverage the foundational work of Manitoba's GHG emissions tool to develop a similar resource for farmers in other provinces and territories.

Key success factors:

- Collaboration between NEFP Alliance stakeholders, as well as commodity organizations and agricultural industry associations.
- Collaboration between EFP oversight bodies, delivery agents, and other relevant government officials and programming staff to ensure streamlined educational and cost-share programming offerings.
- Balancing the desire to ensure comprehensive risk assessment and action plans with the desire to keep workbooks manageable and approachable for farmers; the length of the EFP workbook completion process can be a deterrent for producers.
- Engage with farmers to better understand the tools and resources they would like to see to support their climate change mitigation and adaptation efforts.

²³ Government of Canada. (March 2022.) "Net-Zero Emissions by 2050." Retrieved from: <https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/net-zero-emissions-2050.html>.

²⁴ Government of Canada. (February 2022.) "Agricultural Climate Solutions – On-Farm Climate Action Fund." Retrieved from: <https://agriculture.canada.ca/en/agricultural-programs-and-services/agricultural-climate-solutions-farm-climate-action-fund-0>.

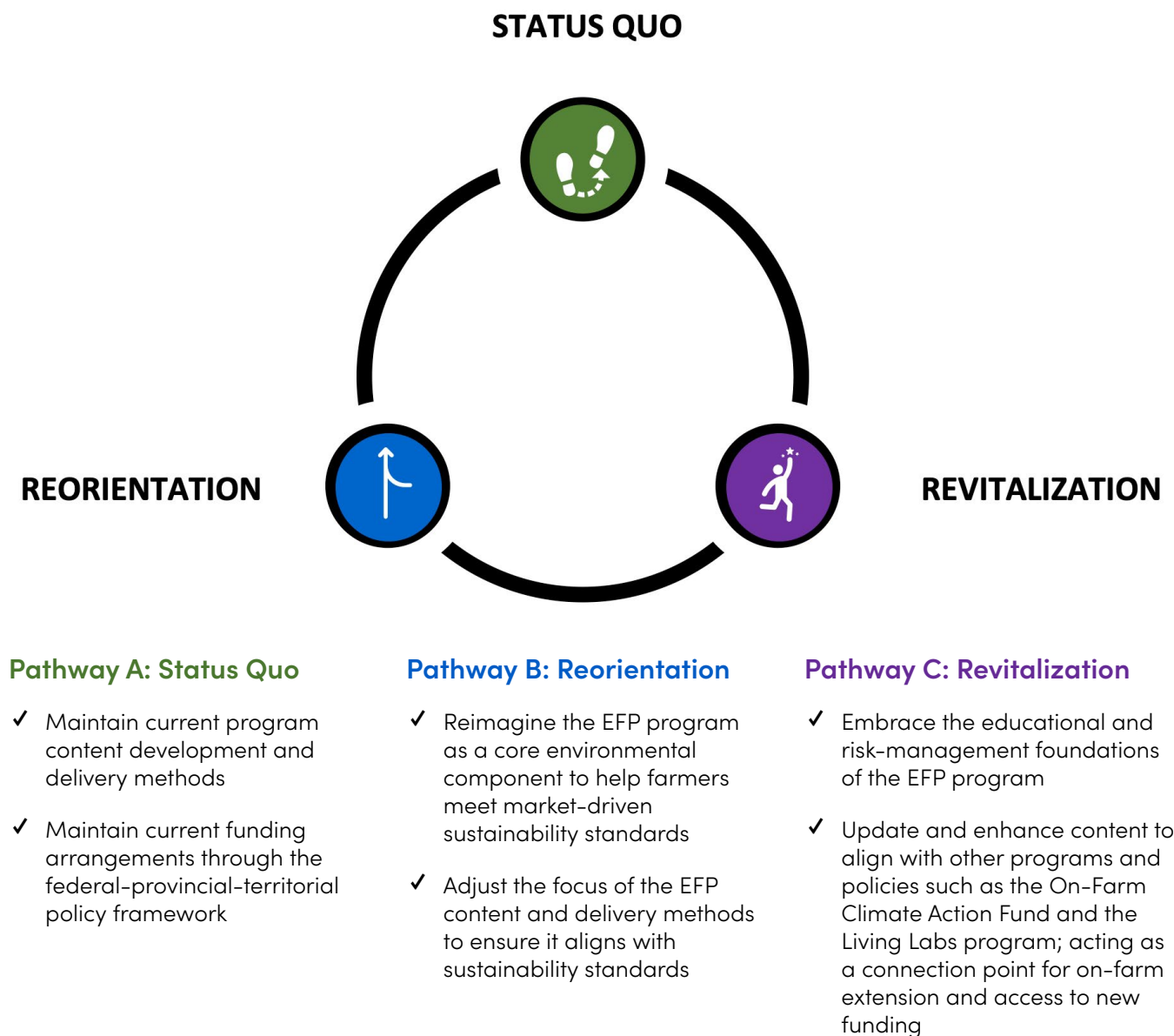
4.2 PATHWAYS FORWARD FOR THE ENVIRONMENTAL FARM PLAN PROGRAM

Based on the themes that emerged through the research and engagement process, three distinct pathways forward are possible for the EFP in Canada. These pathways include:

- Maintaining the status quo
- Being more proactive about integrating the EFP into market-driven sustainability standards, and
- Revitalizing the education and risk-management foundation of the EFP program. (See Figure 3.)

While these three pathways may not be completely mutually exclusive, there are important risks and opportunities to consider under each scenario.

Figure 3. Visualization of three potential pathways forward for Canada's EFP programs.





Pathway A: Status Quo

OPPORTUNITIES	RISKS
<ul style="list-style-type: none"> Trusted and familiar program Content and delivery methods are in place Funding levels could remain consistent with current context Potential for enhanced networking at a national level 	<ul style="list-style-type: none"> Program could become increasingly irrelevant as farmers shift to market-driven sustainability standards and other programs such as carbon market tools Content could become outdated in the face of rapidly emerging issues resulting from climate change Lack of intentional connections to other government priorities (e.g., net zero agriculture)



Pathway B: Reorientation

OPPORTUNITIES	RISKS
<ul style="list-style-type: none"> Take advantage of the years of investment into the development of robust environmental content to fulfill the 'environment pillar' of market-driven sustainability standards Streamline sustainability reporting requirements for farmers Increase EFP relevancy for farmers Support Canada's position as a leader in environmentally friendly farming practices Support market access as the private sector increases sustainability reporting requirements 	<ul style="list-style-type: none"> Could lose the educational aspect of the EFP Could become a 'check-the-box' exercise rather than a risk-management self-assessment Could become subject to market volatility and inconsistency in environmental risk assessment expectations EFP programs would need to explore and potentially implement monitoring, verification and certification schemes to meet sustainability standards' benchmarking requirements, which could lead to privacy concerns²⁵ Content of EFPs would need to be continuously updated to maintain benchmarking status

HOW TO GET THERE

- Creation of the NEFP Alliance, which would foster:
 - Collaboration and communication within and between provincial and territorial EFP stakeholders
 - Piloting solutions to integrate EFP with sustainability programs
- Implement core funding for the EFP program to help ensure its longevity
- Integrate other environmental sustainability program and standards content into the EFP program
 - These efforts would be fostered by collaboration and communication with commodity organizations and industry initiatives (e.g., Canadian Roundtable for Sustainable Beef, Canadian Roundtable for Sustainable Crops, Dairy Farmers of Canada's proAction, Chicken Farmers of Canada's Raised by a Canadian Farmer program, Canadian Agri-food Sustainability Initiative, etc.), as well as the farming community more generally
- Develop a framework to harmonize logistical and technical elements of the EFP to enable integration of the EFP within broader sustainability programs
- Ensure data privacy through secured data collection systems

²⁵ Many farmers are already worried about privacy, particularly if they identify on-farm environmental risks in the completion of their EFPs. See Sven Anders, Peter Boxall, Sarah Van Wyngaarden. (2021.) The 2021 Environmentally Sustainable Agriculture Tracking Survey, p. 41 and 43.



Pathway C: Revitalization

OPPORTUNITIES	RISKS
<ul style="list-style-type: none"> Enhance the educational and risk-management aspects of the EFP program to facilitate farm-level adoption of beneficial management practices This would support high level government priorities such as net zero agriculture, sustainable agricultural landscapes, and nature-based climate solutions 	<ul style="list-style-type: none"> Could require substantial investment of new funding to support incentives, content updates, delivery method improvements (e.g., dedicated program extension staff in each province and territory) Could still face relevancy challenges with competition from market-driven sustainability standards and other government programs
HOW TO GET THERE	
<ul style="list-style-type: none"> Create an NEFP Alliance, which would allow for: <ul style="list-style-type: none"> the review, coordination, and harmonization of existing content nationally the development of frameworks/guidance for addressing topics such as climate change adaptation and mitigation, and species at risk Through a united front provided by the Alliance, work with federal and provincial governments to implement core funding for the EFP programming. This strategy would enable the injection of funding into regional EFP programming for EFP and BMP implementation incentive structures and more resources for extension staff Develop a framework to harmonize logistical and technical elements of the EFP to enable the integration of the EFP with other government programs and priorities Incorporate a climate change mitigation and adaptation lens into EFP programming, which is crucial for net-zero goals and the sustainability of the agricultural industry Engage with farmers to ensure EFP programming continues to meet their needs 	

The future pathways are not mutually exclusive. Governments could collaborate with industry stakeholders, for example, to revitalize EFP programming to enhance educational opportunities for Canadian farmers and to reorient programming to help streamline sustainability reporting requirements. Each potential option also comes with different degrees of resulting impacts, efforts to implement, and costs of implementation.

As the different pathways show, the future of the EFP program is bright. Through collaboration, the leveraging of longstanding program strengths and the grasping of new opportunities, the EFP program can continue to serve as the flagship agri-environmental program and education tool for farmers across Canada. In the process, the EFP program can help farmers to meet Canada's net-zero emissions goals by 2050.

Appendix A: Sample List of EFP Topics²⁶

Water quality and quantity

- Watercourse typography
- Irrigation
- Water wells
- Milking centre washwater
- Stream, ditch and floodplain management

Soil health and nutrient management

- Fertilizer handling, storage and use
- Feedlots and livestock yards
- Feed management
- Use and management of manure and other organic and/or prescribed materials
- On-farm storage, treatment and management of manure and other prescribed materials
- Storage of petroleum products
- Pasture management

Pest management

- Fly and rodent management
- Pesticide handling and storage
- Large predator risk management

Energy and Waste

- Energy use
- Farm waste
- Septic system
- Disposal of livestock mortalities

Biodiversity

- Wildlife habitat and biodiversity
- Woodlands and wildlife
- Wetlands and wildlife ponds
- Species at risk

Other

- Environmental goals
- Nuisance concerns and normal farm practices
- Environmental emergency planning

²⁶ These topics are a sample of topics included in EFP programming across Canada. This list is not exhaustive. Rather, it demonstrates the breadth of educational topics in EFP programming.