



# FCC 2021-22 Climate-Related Disclosures



# FCC's 2021-22 Climate-Related Disclosures

## Climate change at FCC

Farm Credit Canada (FCC) recognizes that climate change is a critical challenge that is facing the globe and impacts the production of food. As a Crown corporation and financial institution 100% dedicated to serving the agriculture and agri-food industry, FCC is committed to supporting the resilience of the industry.

The agriculture and agri-food industry will experience disruptions over the coming decades related to the permanence of a changing climate and the transition to a low carbon economy. A crucial first step is understanding the broad risks and opportunities that the changing climate presents to the industry.

### Key terms

 Climate-related risk	 Climate-related opportunity
<p>The potential negative impacts of climate change on an organization. There are two types of climate related risks:</p> <ul style="list-style-type: none"><li>• Physical risks: Risks due to increased severity of extreme weather events, longer term shifts in precipitation and temperature or increased variability in weather patterns.</li><li>• Transition risks: Risks associated with the shift to a lower-carbon global economy, such as policy and legal actions, technology changes, market responses and reputational considerations.</li></ul>	<p>The potential positive impacts related to mitigation and adaptation efforts of an organization related to climate change, such as resource efficiency, cost savings, the adoption and utilization of low-emission energy sources, the development of new products and services, and the building of resilience along the supply chain.</p>

*"The agriculture and agri-food industry plays a vital role in a sustainable future. Yet, climate change will increasingly impact the industry. FCC is committed to supporting the industry to adapt. This commitment is demonstrated by setting bold targets to reduce our GHG emissions, and to supporting the sustainability journey of our customers with products, tools and knowledge." - Josie Ricci Mackay, Vice-President, Strategy and Sustainability.*





## About this report

FCC supports the recommendations of the Financial Stability Board's Task Force on Climate-Related Financial Disclosures (TCFD) and is committed to producing annual disclosures that consider these recommendations and are in line with the Government of Canada's expectations regarding climate-related financial disclosures.

This is FCC's first TCFD and the content is designed to enable stakeholders to better understand the concentration of climate-sensitive assets in FCC's portfolio and, by extension, agriculture's exposure to climate-related risks. The disclosures will provide a current-state view into FCC's climate risk and share information about future steps to ensure FCC effectively manages the risks that climate poses to its operations and customers and identifies opportunities to support customers on their sustainability journey.

FCC also provides relevant information in other public reports, including the 2021-22 Annual Report and 2021-22 Environmental, Social and Governance (ESG) Report.

FCC is implementing the TCFD recommendations in line with federal Crown corporations, recognizing they will evolve over time. The following table illustrates FCC's response to the 11 TCFD recommendations along with future plans to evolve the report.

	Current state	Future goals
 <b>Governance</b>	<ul style="list-style-type: none"> <li>• Board: Risk Committee, Corporate Governance Committee participation</li> <li>• Management committees: ESG Steering Committee, Enterprise Risk Management Committee</li> <li>• Management: Chief Executive Officer, Chief Risk Officer, Chief Financial Officer, VP, Strategy and Sustainability, VP, Law and Corporate Secretary</li> <li>• Expanded roles in ESG, Marketing and Risk Management signal investment in managing climate risks and opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Engage more frequently and grow knowledge with Board and management on climate risk and opportunities</li> </ul>
 <b>Strategy</b>	<ul style="list-style-type: none"> <li>• Initial identification of physical and transition risks on FCC's portfolio</li> <li>• Initial exploration of options to support customers on their sustainability journey</li> <li>• Partnerships with government, Crowns and beyond</li> </ul>	<ul style="list-style-type: none"> <li>• Finalize climate strategy, including customer offer</li> <li>• Build capacity on climate risk analysis to inform strategic direction</li> <li>• Incorporate climate scenario analysis into strategic planning</li> </ul>
 <b>Risk management</b>	<ul style="list-style-type: none"> <li>• Climate risk identified in risk register</li> <li>• Climate-related stress testing underway</li> <li>• Initial climate risk treatment plan developed</li> <li>• Physical risk experiments and analysis underway (impact of droughts on losses and climate on farmland values)</li> <li>• Physical risk assessments performed as part of FCC's Environmental Risk Credit policies</li> </ul>	<ul style="list-style-type: none"> <li>• Map climate risk to existing risk taxonomy (for example, credit risk)</li> <li>• Sub-sector heatmaps for physical and transition risk</li> <li>• Develop climate-related data strategy</li> <li>• Assess climate-adjusted risk metrics</li> <li>• Establish climate scenario analysis capabilities</li> </ul>
 <b>Metrics and targets</b>	<ul style="list-style-type: none"> <li>• FCC's operational footprint: Scope 1, 2, 3 (category 5, 6)</li> <li>• Carbon-related assets</li> <li>• Climate-sensitive assets</li> <li>• Initial financed emissions estimates</li> </ul>	<ul style="list-style-type: none"> <li>• Mature methodology for financed emissions</li> </ul>

## Governance

FCC's Board of Directors oversees the corporation's ESG direction and strategy, and risk management policies, including FCC's forthcoming climate change strategy. FCC's Board meets six times per year and in 2021-22, the Board received two education sessions specific to ESG, with climate change requirements being a topic highlighted in the sessions. Five Board members have taken further training in climate change and ESG, including one member who has a Sustainability and Climate Risk certificate from the Global Association of Risk Professionals. These topics will be a continuing focus for Board development.

Climate-related topics have been a standing agenda item for the Board's Risk Management Committee for many years. The Risk Management Committee oversees FCC's risk register, in which climate change was identified as a strategic risk in 2021-22. The Risk Management Committee ensures adherence to FCC's enterprise risk management framework and oversees FCC's response to climate risk through frameworks such as the operational risk management framework. This committee meets five times per year.

The Corporate Governance Committee oversees FCC's ESG performance through such frameworks as the social and sustainable management framework and FCC's ESG disclosures such as the TCFD and ESG report. This committee meets four times per year.

As FCC matures its climate-related disclosure, the Audit Committee will provide oversight over the climate-related financial statements.

Overall accountability for FCC's ESG and climate change strategy lies with the President and CEO. Authority for the management of ESG strategy, performance and disclosures is delegated to the Vice-President, Strategy and Sustainability. The Vice-President, Strategy and Sustainability has established a formal ESG business unit that is

accountable for the development of climate change strategies, metrics, communication and disclosures.

This division works collaboratively with Risk Management, Marketing, Human Resources, Operations, Legal and Finance to establish ESG and climate strategies, including the identification of climate-related opportunities and metrics.

An ESG Steering Committee of Enterprise Management Team members and senior leaders at FCC provides oversight on ESG and climate change strategies. This committee also receives updates on trends and challenges related to climate change.

Accountability for climate risk identification and management lies with the Chief Risk Officer. This includes the development of risk treatment plans to mitigate risks associated with climate change.

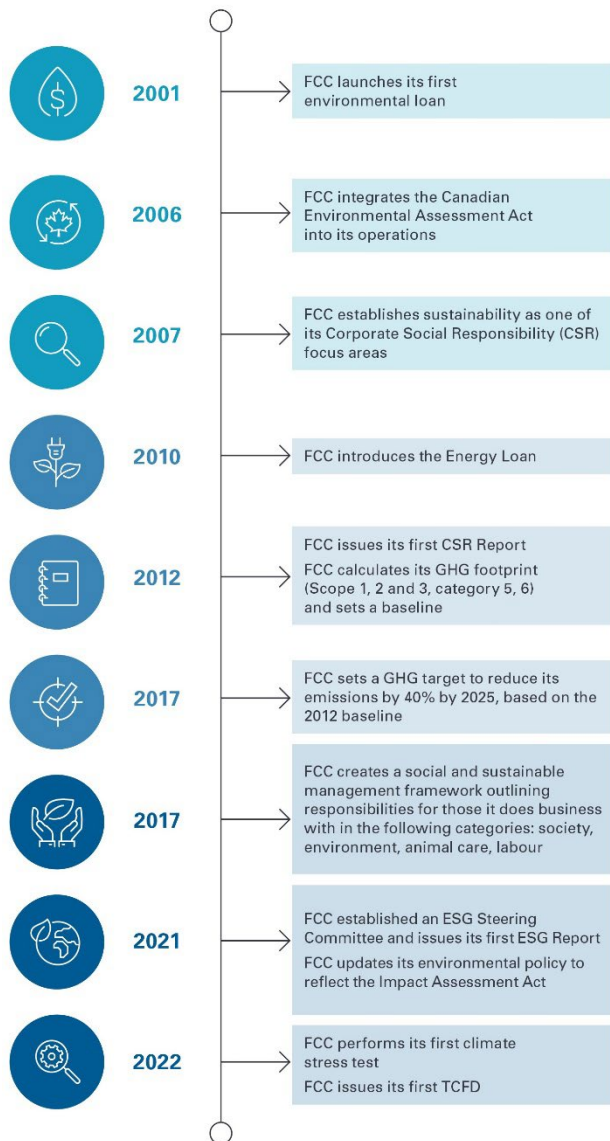
The Enterprise Management Team is engaged for input and approves the overarching ESG and climate change strategies. It also receives quarterly updates on progress toward meeting FCC's Greenhouse gas (GHG) emission reduction target, which is included as a goal linked to compensation.

### Climate governance at FCC



## Strategy

### FCC's climate journey



### Setting FCC's climate strategy

As the only financial institution 100% dedicated to agriculture and agri-food in Canada, FCC recognizes the important role it can play in understanding climate impacts to the industry.

FCC is developing a climate strategy to understand the different impacts that climate may be having on its operation and customers. Weather-related impacts have long been a part of agriculture – and therefore intrinsically linked to FCC's operating environment. However, as climate impacts grow in

frequency and severity across the globe, it is imperative that FCC understand the risks and opportunities facing the industry to support it with climate resilience strategies. In the short term (one to two-year horizon), FCC is looking to understand how the physical and transition risks due to climate will impact the organization and customers.

### Physical and Transition Risks

The agriculture and agri-food industry is subject to acute physical risks such as extreme weather events (forest fires, hurricanes, floods) and chronic physical risks such as droughts and other weather changes affecting growing seasons. These factors can have material impacts on yields, which in turn create increased volatility for commodity prices and returns. With Canadian agriculture being a key player in producing food to feed a growing population, these risks carry with them impacts beyond Canada's borders.

Both the agriculture and agri-food industry, along with FCC as a financial institution, are also subject to a series of transition risks related to climate. Increased regulation, changing consumer preferences, market requirements and technological disruption can all negatively affect the ability of FCC and its customers to operate. With an ever-increasing focus on environmental issues and sustainability standards expected by consumers and retailers, the agriculture and agri-food industry can expect transition risks to increase over the medium term.

Understanding the science and data related to climate will be key to anticipating the trajectory and severity of impacts facing the industry in the years to come. FCC is committed to analyzing degree scenarios — not to predict the future, but to understand the resilience of the organization and industry under different temperature conditions. This information will enable FCC to adjust its strategy to ensure FCC can support the resilience of the industry. As referenced in the Risk Management section of this disclosure on page 7, FCC is conducting stress testing to understand the various outcomes of a climate-stressed industry.



## **Alignment with Government priorities**

As a financial Crown corporation reporting to the Minister of Agriculture and Agri-food Canada (AAFC), FCC has a mandate to support government priorities. Reflecting the letter from Minister Bibeau on February 17, 2022, FCC has adopted the Task Force on Climate-Related Financial Disclosure standards and is issuing its first set of climate-related disclosures in 2022.

The letter also asks that FCC collaborate with other Crown corporations to demonstrate climate leadership, learn from each other, and build momentum on this important initiative. FCC is a member of the Crown Corporation TCFD working group and Crown Corporation Greening Government Community of Practice, where members discuss best practices, upcoming requirements and/or updates to ensure alignment with government expectations.

From an operational footprint perspective, FCC set aggressive GHG emission reduction targets in 2017-18 that are in line with the Greening Government targets. Year after year, FCC makes continuous improvements in the efficiency of its building operations. While FCC does not own any office buildings, it works in partnership with property owners to implement environmentally friendly and energy-efficient changes. As part of the lease criteria for office buildings, FCC considers the energy efficiency of the structure and equipment as one of the factors in determining whether it is suitable office space. Water use and waste are yet to be incorporated into FCC's operational footprint. However, to ensure FCC has a complete picture of emissions, it will be reviewing how to measure waste and water starting in 2022-23.

As part of FCC's commitment to create a great customer experience, employees often drive to meet face-to-face with customers. While we continue to focus on great customer relationships, FCC encourages employees to plan their routes to be as efficient as possible. There will be an evolution in travel patterns and customer preferences in future years as customers adapt to doing business through digital channels.

For 2021-22 operational footprint results, see page 11.

As the transition to a lower-carbon economy continues to evolve, FCC will work to better understand the impacts that this transition is having on the agriculture and agri-food industry. Over the coming fiscal year, FCC will look at how it can support the industry in adopting the latest emission reduction goals put forward by the federal government on March 29, 2022.

## **Supporting our customers on their sustainability journey**

A key aspect of FCC's climate strategy will be to determine where customers and the agriculture industry can benefit from some of the opportunities that climate is presenting. As more industries look to meet net zero carbon emissions targets, the demand for carbon credits to offset emissions will rise over the coming years. Agriculture is an industry uniquely poised to solve this demand by creating on-farm carbon credits through various regenerative agriculture practices. This presents an opportunity for producers to be part of the climate solution while generating revenue from new sources along the way. FCC's climate strategy will explore what role FCC can play in facilitating the adoption of nature-based climate solutions.

FCC offers customers financing and knowledge products to support their success. Providing science-based knowledge of climate impacts will be key to supporting the resilience of the industry. As more is known on the impacts of climate on agriculture and agri-food by geography and sector, the better positioned FCC will be to support customers with useful insights to help them adapt and mitigate these impacts.

FCC offers sustainable finance products with special features designed to support sustainable activities. Whether using FCC's Enviro-Loan, Energy loan or other loan products, customers have access to financing to support environmental practices, projects or upgrades. FCC is also working with leaders in the agriculture industry to develop additional sustainability-based incentives.

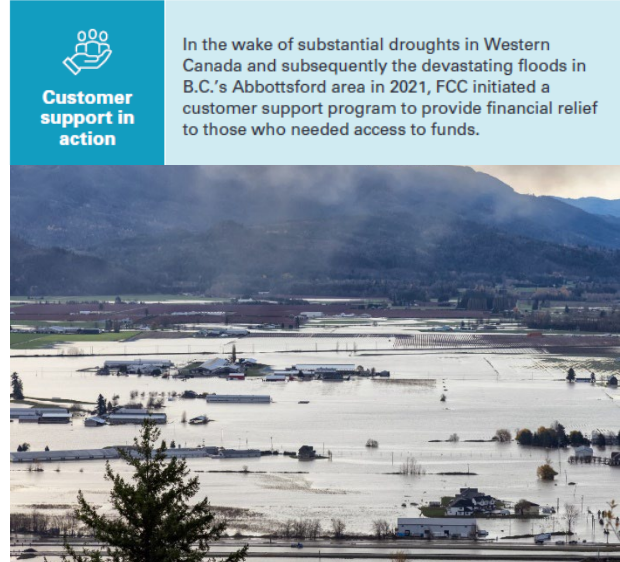
FCC also supports customers in understanding their sustainability efforts through its software program AgExpert Field, which enables them to track and manage data related to crop inputs such as seed,

fertilizer, crop protection products, water, etc. The more easily available information producers have on agricultural factors, the better they can make decisions on climate change mitigation and adaptation strategies, financial management and environmental stewardship.

FCC is advancing innovation through its venture capital program, which provides needed capital through fund investments, as well as program support to external partners that provide mentorship, networks and acceleration services for agriculture and food companies from seed to late-stage development. The program supports companies developing agriculture technology practices to solve Canadian and global challenges such as increasing productivity and efficiency and adopting environmentally sustainable practices. FCC plays a catalyst role to provide the necessary funding companies need to build innovative technologies through investment in venture funds with a focus in the agriculture and food sector. Fund investments include companies that are building digital agriculture tools, improving GHG emissions, reducing impacts of fertilizer and pesticide use, promoting soil health, and developing products that are better for people and the planet.

While the industry continues to adopt long-term solutions to mitigate and adapt to the impacts of a changing climate, there is still a need to offer flexible solutions to allow customers to manage through short-term impacts. FCC has long taken the position of helping customers who face financial challenges due to adverse weather events. FCC's customer support programs offer a variety of solutions such as credit lines and deferral of interest or principal for six to 12 months to those affected by these weather events.

## Customer support in action



## Risk Management

### FCC's overall risk management approach

FCC uses an enterprise risk management framework and policy to ensure significant risks, including climate risk, are adequately governed, identified, assessed, managed, monitored and reported. Effective enterprise risk management enables FCC to achieve its strategic objectives and ensure sustainable business success.

FCC's four major categories of risks are strategic, financial (for example, credit risk), operational and reputation. Each category includes distinct risks that are assessed for likelihood and impact using various tools. The overall assessment of risk is reflected in the amount of capital required using FCC's capital and allowance models. FCC conducts stress tests on key financial risks and economic variables to understand the corporation's vulnerability to a range of scenarios affecting agriculture.

FCC develops and updates an annual risk register using several sources and processes to identify risk:

- FCC's Board of Directors and senior leadership provide input on top risks and emerging risks for FCC and Canadian agriculture
- review of external publications to identify and/or update emerging risks on the risk register
- significant control gaps noted through third-party risk assessments of FCC are reflected accordingly on the risk register
- subcategories of operational risk that pose considerable threat and should be treated at an enterprise level

Based on the information above, each risk event is classified in the register with the following information:

- risk category and subcategory
- risk event description

A clear risk event definition is essential to understand, prioritize and manage the risk effectively. The risk event must be described as an event that may warrant management action or monitoring. The event should be independent in that it is not a cause or consequence of another risk event in the risk register.

At least annually, FCC's risk assessment matrix is updated to reflect the risk appetite framework and policy. Management risk committee members assess each risk event proposed for inclusion on the risk register. This assessment is based on their knowledge, experience and expert judgment, as well as quantitative metrics such as key risk indicators or event occurrence in the corporation, where available.

### Identification and assessment of climate-related risk

Due to the nature of the agriculture industry, there is a high likelihood that over time, all FCC customers will be affected by the physical risks and transition risks associated with climate change.

In 2021, climate risk was elevated higher on FCC's risk register. Specifically, FCC identified that adverse impacts from physical climate events or requirements to transition to a lower-carbon economy could pose a risk to FCC.

In 2022, FCC's risk appetite statement was enhanced for ESG impacts, including climate. A strategic risk tolerance qualitatively describes FCC's position to operate sustainably to reduce the corporation's impact on the environment and support customers to do the same. We work with customers to identify and improve their impact on the environment, society and animal welfare, and accept that not all customers will progress at the same pace.

### Managing climate-related risk

By elevating climate risk, FCC has launched a series of actions to mitigate the risks associated with climate change. A risk treatment plan has been developed to understand the impacts that climate risk poses to FCC's business and customers, and to develop the means to measure and monitor those impacts.

In response to climate risk being elevated in the risk register, a climate-risk scenario was conducted through an enterprise-wide stress testing program. Existing stress testing models and processes were used to help better understand FCC's exposure to climate-related risks. Results were shared with the Risk Committee of the Board and considered in FCC's Internal Capital Adequacy Assessment Process



(ICAAP). Work is underway to enhance FCC's scenario analysis capabilities.

FCC understands that agriculture plays an important role in addressing air quality, land usage and water protection challenges now and in the future. As part of the loan approval process, FCC works with customers to review environmental risk through questionnaires, site inspections and assessment reports from qualified consultants. FCC's expectations are outlined in the integrity declaration signed by all customers. The integrity declaration balances business decisions with individual needs to achieve FCC's vision of sustainable growth and prosperity for Canada's agriculture industry. It also outlines expectations related to topics such as environment, animal welfare, labour and society, and articulates who FCC will and will not do business with.

FCC exercises all reasonable care to safeguard the environment and protect the value of real property taken as lending security. As a federal Crown corporation, FCC is also a federal authority with accountabilities under the Impact Assessment Act

and its related regulations and instruments (together, the IAA). FCC complies with the requirements of the IAA when financing a project that qualifies as a designated project under the IAA. The IAA states that federal authorities must not carry out or permit projects as defined under the IAA to be carried out on federally owned lands or outside Canada unless the federal authority determines the project is not likely to cause significant adverse environmental effects (which means changes to the environment and the impact of these changes on the Indigenous peoples of Canada and on health, social and economic conditions) or the Governor in Council decides the effects are justified under the circumstances.

As more is understood around the nature of climate risk on the corporation and its portfolio, FCC will explore how best to incorporate this risk into its risk management practices and mandate to provide financial services to the agriculture and agri-food industry. FCC expects this process to mature and evolve over time along with its strategic approach to achieve a measured and impactful approach to climate risk management.

## Metrics and targets

FCC is committed to supporting the Government of Canada's goal to attain net zero emissions by 2050, a target in line with the Paris Agreement's ambition for limiting global warming to well below 2°C. A first step is to understand FCC's exposure to climate impacts, with the goal of creating bold targets to ensure the organization's resilience and that of the industry.

Part of this evolution will involve understanding and measuring carbon emissions related to FCC's operations and portfolio, and then setting targets and developing a clear path forward to achieve those targets.

### Overall portfolio

As a Crown corporation, FCC has a mandate to provide financial services to the agriculture and agri-food industry. Given this mandate, FCC's portfolio is not considered "carbon-related assets" as typically defined in TCFD reporting<sup>1</sup>. However, FCC has observed that as TCFD reporting practices have

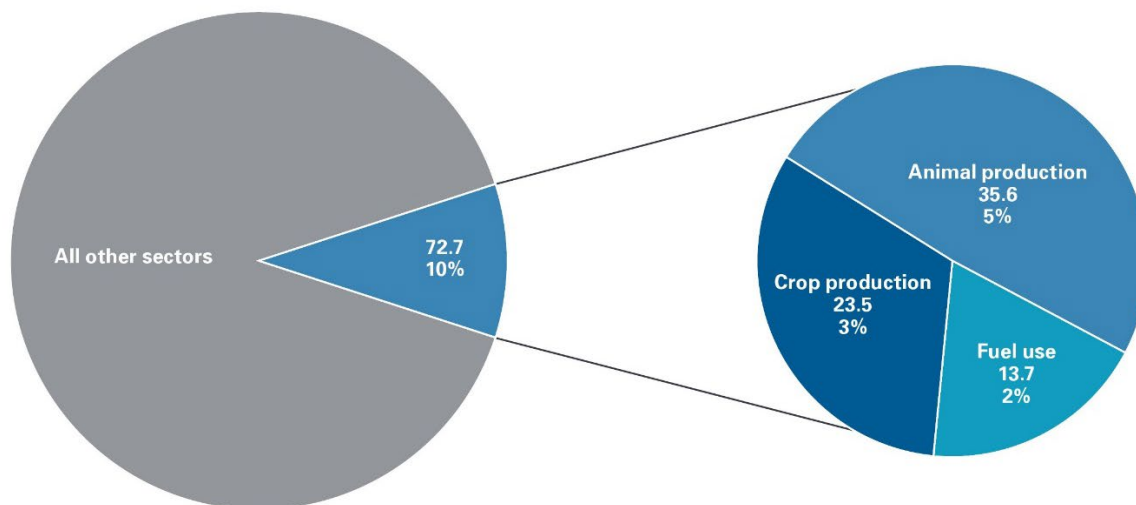
matured, a broader concept of "climate-sensitive assets" has emerged. This concept is still being standardized across the industry, but for those that have adopted it, agriculture and food sectors tend to be classified as climate-sensitive assets – in which case, it would account for the entirety of FCC's \$44.5 billion portfolio.

FCC has more work to do to understand how that sensitivity varies across different sectors and geographies in its portfolio — a good starting point is understanding the emissions profile of Canadian agriculture and emissions related to FCC's portfolio (financed emissions).

### GHG emissions from Canadian agriculture

The federal government released Canada's 2030 Emissions Reduction Plan to reduce emissions by 2030, with the goal of net zero by 2050. The plan shows agriculture as having 10% of Canada's total GHG emissions, both for the reference year (2005) as well as in the most recently reported year (2019) from Canada's 2021 National Inventory Report.




### GHG emissions (Mt CO<sub>2</sub>e) for agriculture in Canada



Source: Canada's GHG Emissions by Economic Sector from the "National Inventory Report 1990 – 2019"  
Note: Mt CO<sub>2</sub>e = million tonnes of carbon dioxide equivalent

<sup>1</sup> Defined as assets tied to the energy and utilities sectors under the Global Industry Classification Standard, excluding water utilities and independent power and renewable electricity producer industries.

The National Inventory Report defines each category as follows:

Agriculture	Emissions resulting from:
 <b>On-farm fuel use</b>	Stationary combustion, on-site transportation and process emissions from the agricultural, hunting and trapping industry (excluding food processing, farm machinery manufacturing and repair)
 <b>Crop production</b>	Application of biosolids and inorganic nitrogen fertilizers, decomposition of crop residues, loss of organic carbon in soil, cultivation of organic soils, indirect emissions from leaching and volatilization, field burning of agricultural residues, liming and urea application
 <b>Animal production</b>	Animal housing, manure storage, manure deposited by grazing animals and application of manure to managed soils

### Scope 3, category 15 – financed emissions

FCC has been measuring its operational carbon footprint for several years, but not emissions related to its portfolio.

FCC's portfolio is made up of loans receivable in primary production, agribusiness and agri-food.

### Loans receivable by sector distribution

For the year ending March 31 (\$ millions)	2022
<b>Loans receivable*</b>	
Primary production financing	
Oilseed and grain	14,201
Dairy	6,929
Beef	3,713
Poultry	3,005
Other	3,025
Greenhouse	1,970
Alliances	1,707
Hogs	1,395
Fruit	1,320
Part-time farming	-
Total primary production financing	37,265
Agribusiness	5,432
Agri-food	1,827
<b>Loans receivable by sector distribution</b>	<b>44,524</b>

\*Excludes deferred loan fees

FCC's portfolio is dispersed across the country in the following geographies:

### Loans receivable by geographic distribution

For the year ending March 31 (\$ millions)	2022
<b>Loans receivable*</b>	
Ontario	13,009
Alberta	8,179
Saskatchewan	8,306
Quebec	6,158
British Columbia	4,008
Manitoba	3,519
Atlantic	1,345
<b>Loans receivable by geographic distribution</b>	<b>44,524</b>

\*Excludes deferred loan fees

As an initial approach to estimating its financed emissions, FCC did a top-down assessment using:

- Government of Canada's GHG emissions by economic sector and province<sup>2</sup>
- Statistics Canada's balance sheet of the agricultural sector as at December 31<sup>3</sup>
- Statistics Canada's farm debt outstanding<sup>4</sup>
- Select FCC portfolio statistics by sector and province

<sup>2</sup> <https://open.canada.ca/data/en/dataset/779c7bcf-4982-47eb-af1b-a33618a05e5b/resource/a88e9064-5757-4339-9655-b20ee368c312>

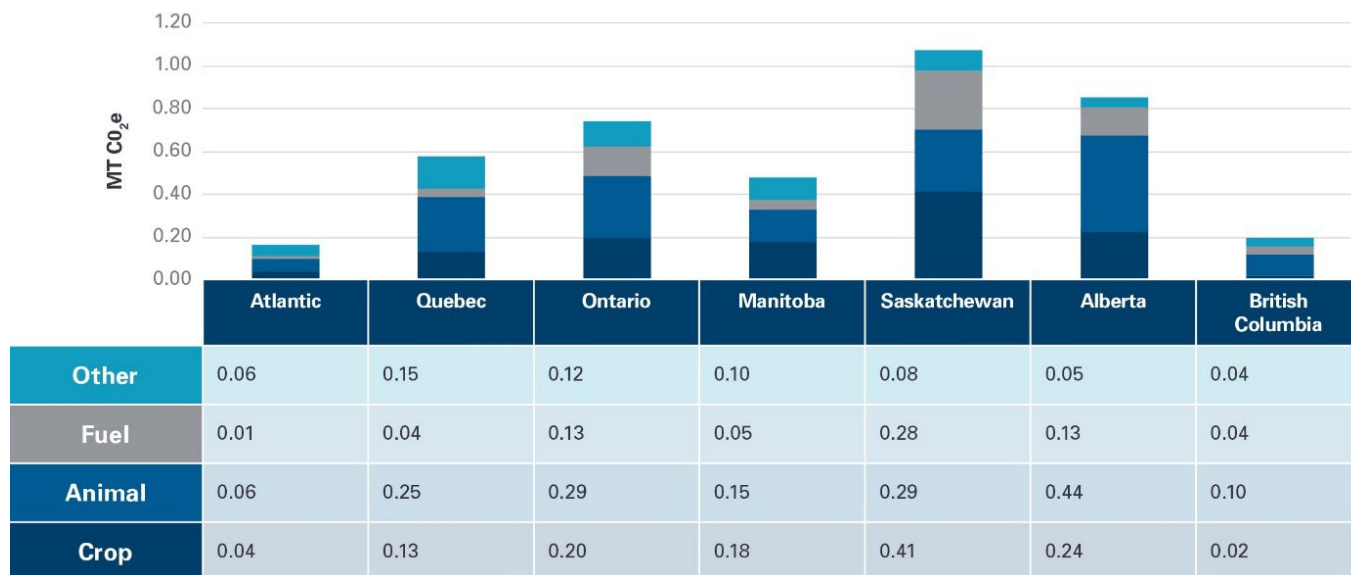
<sup>3</sup> <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210005601>

<sup>4</sup> <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210005101>

Applying a currently available industry approach to measurement, the results suggest that FCC's agriculture lending portfolio is attributable to 3.6 Mt CO<sub>2</sub>e of the 72.7 Mt CO<sub>2</sub>e for all Canadian agriculture – or approximately 5%. Some of FCC's lending to

agribusiness and agri-food is considered outside of agriculture from a GHG emissions perspective. To account for this, FCC scaled up its financed emissions estimate proportionately. This resulted in a financed emissions estimate of 4.1 Mt CO<sub>2</sub>e.

## Financed Emissions



This top-down estimate is one way to measure financed emissions and is meant to give us an early benchmark. Going forward, FCC will conduct a bottom-up assessment using industry intensity factors and more granular portfolio information to better align with disclosure frameworks like the Partnership for Carbon Accounting Financials. Better measurement will allow for better decisions and better targets.

## Operational footprint

FCC has had an aggressive GHG emission reduction target since 2017. Its goal is to reduce the organization's Scope 1, 2 and 3 (category 5 and 6) emissions by the equivalent of 40% by 2025, based on 2012 levels. With a 2012 baseline level of 8,386 tonnes of carbon dioxide equivalent (T CO<sub>2</sub>e), FCC must reduce its emissions by 307 T CO<sub>2</sub>e every year from 2017-18 to 2024-25. To-date, FCC has reduced its operational footprint by 37%. This reduction was achieved in 2021-22 in large part due to significant COVID-related travel restrictions that led to fewer emissions related to Scope 3.

FCC uses the GHG Protocol as the basis for conducting its carbon footprint assessment. The assessment is consistent with ISO 14064-1, but is not considered a complete organizational inventory as waste and water are currently not calculated.

In brief, Scope 1 (direct) sources refer to emissions from sources owned or controlled by the organization (example: on-site fuel combustion). Scope 2 (energy indirect) sources refer to emissions created during energy generation (examples: electricity, direct heat/cooling) that occur off-site but are attributable to the organization. Scope 3 (other indirect) sources refer to emissions from sources not owned or controlled by the organization but related to its operations. An example of a Scope 3 emission source would be business travel — each trip is related to the organization's activities, but it has no ownership of the vehicles used or control over the travel patterns.

For FCC's operational footprint, the GHG sources identified were as follows:

<b>Scope 1</b>	<ul style="list-style-type: none"> <li>• Natural gas combustion for heating</li> <li>• Releases of halocarbons by HVAC equipment</li> <li>• Diesel, gasoline, fuel oil and propane combustion in generators</li> </ul>
<b>Scope 2</b>	<ul style="list-style-type: none"> <li>• Purchased electricity</li> </ul>
<b>Scope 3</b>	<ul style="list-style-type: none"> <li>• Employee travel by vehicle (personal and rental)</li> <li>• Air travel</li> <li>• Paper usage</li> </ul>

The following table includes FCC's emission reduction results:

<b>FCC's GHG metrics</b>	<b>Unit</b>	<b>2021-22</b>	<b>2020-21</b>	<b>2019-20</b>	<b>2018-19</b>	<b>2017-18</b>
Scope 1	T CO <sub>2</sub> e	1,381	1,487	1,285	1,560	1,407
Scope 2	T CO <sub>2</sub> e	3,220	3,639	4,209	3,825	3,727
Scope 3, category 5: Emissions from waste generated by operations	T CO <sub>2</sub> e	66	50	204	229	356
Scope 3, category 6: Emissions from business travel	T CO <sub>2</sub> e	551	228	1,834	1,970	1,892
<b>Total operational emissions*</b>	<b>T CO<sub>2</sub>e</b>	<b>5,218</b>	<b>5,404</b>	<b>7,532</b>	<b>7,584</b>	<b>7,382</b>
GHG reductions from Renewable Energy Certificates	T CO <sub>2</sub> e	0	0	966	711	202
<b>Net operational GHG emissions</b>	<b>T CO<sub>2</sub>e</b>	<b>5,218</b>	<b>5,404</b>	<b>6,566</b>	<b>6,873</b>	<b>7,180</b>
Operational carbon intensity	T CO <sub>2</sub> e/ \$M revenue	3.33	3.43	4.27	4.67	5.51
<b>Financed emissions (Scope 3, category 15)</b>	<b>Mt CO<sub>2</sub>e</b>	<b>4.1</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

\*Emission factors were used to calculate the GHG emissions for each activity. Local emission factors were used where available; otherwise default regional, national or international factors were used. Where facility activity data were not directly supplied, internal intensity factors were generated from supplied data and extrapolated to remaining facilities.

For more information about FCC's ESG commitments and climate change initiatives, visit [fcc.ca](http://fcc.ca). We welcome your questions and feedback on FCC's approach at [esg@fcc.ca](mailto:esg@fcc.ca).





*DREAM. GROW. THRIVE.*