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2021-2022 Strategic Issues Survey of Food and Beverage Processors (Wave III)

Final Report

Prepared for Agriculture and Agri-Food Canada

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This public opinion research report presents the results of a survey conducted by Environics Research on behalf of Agriculture and Agri-Food Canada. The research was conducted from February to March 2022.

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Executive summary

Environics Research (Environics) is pleased to present this report to Agriculture and Agri-Food Canada with findings from the third wave of the Strategic Issues Survey of Food and Beverage Processors.

A. Background and objectives

The food and beverage processing industry is the second largest manufacturing industry in Canada and is one of Agriculture and Agri-Food Canada's (AAFC) key stakeholder groups. Overall, this sector accounts for 2 percent of the national Gross Domestic Product (GDP), providing employment to almost 250,000 Canadians.

This is the third wave of AAFC's Strategic Issues Survey of Food and Beverage Processors; previous waves were conducted in 2017 and 2018. The survey is intended to gain critical insights on the opinions, issues and challenges faced by Canadian processors. The findings will be used in the development of policies, programs and initiatives to better serve the sector.

This wave of the survey builds on tracking questions from previous waves on issues to identify trends over time; this includes public trust and evaluating the Canadian Agricultural Partnership using AAFC's performance indicators. This wave also provides insights on new and evolving areas of interest to AAFC including processor priorities, challenges and barriers, environmental sustainability, and food waste. This wave's questionnaire was also designed to gather firmographic information on company characteristics like company size, revenue, ownership, automation, and organic certification. The contract value for this project was \$89,937.04 including HST.

B. Methodology

To meet these objectives, Environics conducted a 15 minute telephone survey with 501 Canadian food or beverage processors or manufacturers, drawn from a sample list of 6,553 companies. The survey was conducted in English and French from February 10 to March 4, 2022. Specifically, the survey was conducted with Canadian adults, aged 18 and older, who are food or beverage processors and have responsibility for business strategy and/or operations. No quotas were set for any business characteristics. The final survey data were weighted to match company size and region proportions in the source list. The margin of error for this sample is +/-4.1%.

More information about the methodology for research is included in Appendix A of the full report.

C. Key findings

- Food and beverage processors have been pursuing multiple priorities over the past two years, with supply chain issues and public trust ranked at the top (66% say each is a high priority for their company). Not far behind, labour issues (60%) and food waste (59%) are also high priorities for a majority. The lower relative priority of environmental sustainability (47%) and workplace equity (43%) suggests these issues are generally seen as priorities, but do not carry the same urgency as the other four.
- Labour issues arise as a key theme throughout the survey findings, particularly among some key sub-groups. While labour issues are rated third overall (60% high priority), it is the top priority for companies with 25 or more employees and companies that produce meat, poultry, or seafood products (more specifically, proteins). These processors are also more likely to have implemented policies to address

labour concerns (25-49 employees at 87%, 50+ employees at 92%, proteins processors at 85%). Inadequate labour capacity also strongly represents the reason that most often contributes to food waste (22%), and especially among larger companies with 50 or more employees (41%).

- Food waste is an area most processors are addressing to some degree (63% have implemented food loss and waste reduction programs). Companies point to item quality rejection (61%) and equipment breakdowns (59%) as the main culprits (contributing a lot or a little) to food waste. Most often, processors try to manage food waste by optimizing their processes and conducting waste assessments (48%), though about one in five (21%) say they have not done anything to address this issue. The top barrier to further efforts to reduce food waste is financial (23%); similar proportions say they have no barriers (22%), or could not think of any (28%).
- When asked to consider the reasons why they implement programs or initiatives related to environmental sustainability, labour, food waste and public trust, the most common reasons are regulatory requirements (79% very important) and to control costs (73%). Doing the right thing ranks third, with about two in three companies (65%) say this is a very important reason for implementing these kinds of initiatives; this reason is particularly important to larger companies (50 or more employees), ranking second (76%) behind regulatory requirements and ahead of cost control.
- Although environmental sustainability may not have been the top priority for many processors over the past two years, most companies (83%) have implemented at least one environmental initiative or program, with sustainable packaging (57%) as the most common. The main barrier for food and beverage processors and manufacturers preventing them from implementing environmental sustainability measures is cost (mentioned unprompted by 51%, well ahead of any other single barrier).
- Awareness of the Canadian Agricultural Partnership sits at 20 percent, a decline compared to 2018 (26%) when it was first launched. Those aware of the partnership, however, rate it favourably, with three in four (75%) saying they have a very or somewhat favourable impression of the Partnership; this is a marked increase in favourable impressions compared to 2018 (42%). This shift in awareness and impressions may be due to more discussion around the Partnership at its outset in 2018, or that the program is being mistaken for assistance programs that have been created during the pandemic.
- The survey was designed to identify the extent of diversity in the ownership of Canadian processors. About one in three (35%) companies responding to the survey are majority-owned by members of equity-seeking groups. This includes those owned by women (29%), members of visible minorities (8%), individuals who identify as LGBTQ2+ (2%), people with disabilities (1%), and Indigenous peoples (1%).
- The survey identified a segment of companies that are environmentally leaning, defined as those who report implementing two or more environmental initiatives. While these companies are generally similar in their business characteristics compared to other companies, environmentally leaning companies tend to be more forward-thinking than others in a number of ways. They are more likely to prioritize labour issues (65%), food waste (64%), environmental sustainability (55%), and workplace equity (52%). Compared to others, environmentally leaning companies place higher importance on environmental impact (58%) as a reason for initiatives and policies, but they also place more importance on cost (76%), competitive advantage (47%), and doing the right thing (72%). This suggests that environmental initiatives likely go hand-in-hand with other business efficiency strategies and approaches.

D. Political neutrality statement and contact information

Research Firm:

Environics Research (Environics)

Contract Number: 01B68-220934/001/CY

Contract Award Date: December 20, 2021

I hereby certify as a senior officer of Environics Research that the deliverables fully comply with the Government of Canada political neutrality requirements outlined in the Communications Policy of the Government of Canada, and Procedures for Planning and Contracting Public Opinion Research. Specifically, the deliverables do not include information on electoral voting intentions, political party preferences, standings with the electorate, or ratings of the performance of a political party or its leaders.



Signed:

Date: March 29, 2022

Stephanie Coulter

Senior Research Associate, Corporate and Public Affairs

Environics Research

Introduction

Environics Research (Environics) is pleased to present this report to Agriculture and Agri-Food Canada with findings from the third wave of the Strategic Issues Survey of Food and Beverage Processors.

The food and beverage processing industry is the second largest manufacturing industry in Canada and is one of Agriculture and Agri-Food Canada's (AAFC) key stakeholder groups. About 6,500 food and beverage processing establishments exist in Canada. Many of these establishments (90%) have less than 100 employees, 9% have between 100 and 500 employees, while only 1% of establishments have more than 500 employees. According to the 2016 Canadian Employer-Employee Dynamics Database (CEEDD), 15% of food and beverage processing enterprises were (majority) owned by women, another 14% were equally-owned by women and men, and 44% were (majority) owned by men. Overall, this sector accounts for 2 percent of the national Gross Domestic Product (GDP), providing employment to almost 250,000 Canadians.

AAFC has been conducting the Strategic Issues Survey, a survey of producers since 2007, to gain critical insights on the opinions, issues and challenges facing agricultural producers in Canada. In its last iteration in 2017, the scope was broadened to capture the views of food and beverage processors in Canada. Given the different methodological challenges reaching these two audiences, the Survey of Food and Beverage Processors was conducted separately from the producer survey beginning with the 2017 survey.

The third wave of AAFC's Strategic Issues Survey of Food and Beverage Processors is intended to gain critical insights on the opinions, issues and challenges faced by Canadian processors. The findings will be used in the development of policies, programs and initiatives to better serve the sector. This survey builds on tracking questions from previous waves to identify trends over time but also provides insights on new and evolving areas of interest to AAFC. More specifically, the research sought to provide AAFC with insights on:

- prioritization and adaptation to challenges and barriers;
- trends in innovation, automation, research and development;
- evaluate the [Canadian Agricultural Partnership framework](#) using the department's performance indicators;
- views on sustainability (for example, packaging and food waste); and
- impact of changing consumer preferences on business.

This report begins with an executive summary outlining key findings and conclusions, followed by detailed analysis of the quantitative results. A detailed set of "banner tables" is provided under separate cover; this presents results for all survey questions by company segments such as location of headquarters, business size, and type of business as well as individual respondent characteristics like gender and language.

The results are expressed as percentages unless otherwise noted. Results may not add up to 100% due to rounding or multiple responses. Net results cited in the text may not exactly match individual results shown in the charts due to rounding. Statistical differences between sub-groups or between waves are determined based on Z-test testing at 95% confidence.

Findings in this report are based on the telephone sample of 501 Canadian businesses, conducted from February 10 to March 4, 2022. This sample was drawn from a list of food and beverage processors from Dun & Bradstreet Canada; after cleaning the list to remove duplicates and defunct entries, the list contained 6,553 eligible records. Unless otherwise noted, all sub-group comparisons (for example, region, revenue, business size) are based on this sample.

Tracking results, where shown, are based on previous waves of the survey conducted in 2017 (n=376) and 2018 (n=400).

Additional details about the methodology can be found in the Methodology section at the end of this report.

Notes on sub-group analysis

Companies implementing two or more environmental initiatives in question 7 (Which of the following programs or initiatives has your company implemented?) are defined as environmentally leaning for sub-group analysis.

Organic certified companies are combined with those currently in the process of seeking an organic certification for sub-group analysis, due to the limited sample in the latter group.

For the purposes of sub-group analysis, companies are organized into six broad categories by type of product. This grouping creates larger sample sizes that allow for some comparisons between the following groups:

1. Grain-based includes those processing animal foods, grain and oilseed milling, and bakery products.
2. Fruit and vegetable.
3. Beverage includes alcoholic and non-alcoholic beverage processors.
4. Dairy.
5. Protein includes those processing meat, poultry, and seafood, including rendering.
6. Other products include specialty foods, sugar-based items, candy, and other miscellaneous products not covered by the other five categories.

II. Detailed findings

1. Business priorities and initiatives

Company priorities over the past two years

Supply chain issues and public trust are the top two priorities for companies over the past two years.

When asked to consider six broad priorities, companies most often say supply chain issues and public trust are high priorities for food and beverage processors over the past two years; two-thirds (66%) of companies name each of these as a high priority. Labour issues (60%) and food waste (59%) are also considered a high priority for most businesses.

Environment (47%) and workplace equity (43%) ranked lowest of the six issues. This ranking suggests companies may see these two priorities as low-level concerns rather than urgencies, despite potentially acting as a high priority for others.

Priority level over past two years

Priority	High priority	Medium priority	Low priority	Don't know / Prefer not to say
Addressing supply chain issues	66%	21%	11%	2%
Addressing public perception, image, and trust	66%	23%	10%	1%
Addressing labour issues, such as capacity and retention	60%	22%	16%	2%
Reducing food loss and waste created during processing	59%	21%	19%	2%
Improving environmental sustainability	47%	40%	11%	2%
Improving equity, diversity, and inclusion	43%	36%	17%	4%

Q6. Thinking about the past two years, please tell me if each of the following has been a high, medium or low priority for your company?

Some sub-groups place more emphasis on some priorities compared to others:

- For companies with 25 employees or more, labour issues rank first; this issue is high priority for three quarters (75%) of companies with 25 to 49 employees, and companies with 50 employees or more (83%).
- Companies based in Quebec are more likely to say that public trust (74%), labour issues (70%), and environmental sustainability (50%) are high priority.
- For companies based in Ontario, supply chain issues (70%) and environmental sustainability (50%) were noted as high priority more often compared to other regions.

- Supply chain issues are also a higher priority issue for companies based in Manitoba and Saskatchewan (79%).
- Companies with annual revenue above \$5M are more likely to note supply chain issues (78%), labour issues (82%), and equity (51%) as high priority.
- For companies earning less than \$250K, public trust is a higher priority compared to other groups (74%), while labour issues are a lower concern (43%).
- For organic certified companies and those seeking an organic certification, public trust is the top ranked issue with over seven in ten (77%) calling it a high priority, followed by environmental sustainability (59%).
- Environmentally leaning companies say that labour issues (65%), food waste (64%), environmental sustainability (55%), and workplace equity (52%) are higher priority for them.
- Companies working in dairy (54%) and proteins (50%) are less likely to say that supply chain issues are high priority. For dairy processors, public trust is the top concern (81% high priority). Labour issues are the most important issue for companies in the proteins category (71% high priority).

Programs and initiatives - tracking

Nearly all companies (94%) report implementing programs to enhance public trust, most often traceability systems. Eight in ten (83%) have implemented at least one type of environmentally-related initiative.

When asked if their company has implemented a list of different programs and initiatives, traceability systems (80%), food waste reduction measures (63%), enhanced nutritional content (59%), labour retention policies (58%), and sustainable packaging (57%) are the most frequent individual measures selected by food and beverage processors.

Grouped by topic, public trust measures overall are most common, with a vast majority of companies (94%) saying they have implemented at least one of these measures. Smaller majorities report implementing at least one measure in the other areas of environment (83%), labour (71%), and food waste (63%).

Companies implementing two or more environmental initiatives are defined as “environmentally – leaning” and discussed as a sub-group throughout this report; this group comprises over six in ten (65%) of companies.

Iterations of this question were asked previously in the 2017 and 2018 waves of the survey, however, the list has expanded to include more initiatives and in some instances, wording of list items has been revised. Differences in tracking data from previous waves reflects these methodological changes.

Programs and initiatives implemented by company

Programs / initiatives	2022 (n = 501)	2018 (n=400)	2017 (n=376)
Public Trust	94%	-	-
Traceability system	80%	-	-
Enhanced nutritional content/healthy ingredients	59%	75%	-
Assurance systems like organic, kosher, or sustainably sourced	54%	-	-
Enhanced animal welfare practices*	24%	64%	26%
Environment	83%	-	-
Sustainable packaging programs	57%	58%	49%
Water conservation measures	48%	62%	40%
Installing energy efficient technology, such as energy efficient chillers**	43%	60%	49%
Environmental stewardship programs	40%	60%	39%
Climate adaptation strategy***	22%	30%	22%
Sustainable transportation programs	22%	34%	27%
Using clean energy, like wind or solar, to power your operations	9%	-	-

Labour Issues	71%	-	-
Policies to address employee retention and absenteeism	58%	-	-
Workforce diversity and inclusion program	49%	-	-
Food Waste	63%	-	-
Food loss and waste reduction programs****	63%	58%	49%

Q7. Which of the following programs or initiatives has your company implemented? If something doesn't apply to your company, please say so.

*Asked as "humane animal welfare practices" in 2017-2018.

**Asked as "more energy efficient/clean technologies, such as energy efficient chillers" in 2017-2018.

***Revised from "climate change strategy" in 2017-2018.

****Revised from "food waste programs" in 2017-2018.

Several programs and initiatives differ by company revenue, with lower revenue companies least likely to implement them. This includes traceability systems, assurance systems, sustainable transportation, employee retention, and workforce diversity programs. Additionally, companies with 50 or more employees are more likely than smaller companies (by a margin of 13 to 35 points) to say they have implemented nearly all measures in the list; the exceptions are traceability systems, clean energy, and food waste where companies do not differ by size. These patterns speak to the ability of larger companies to invest resources into these initiatives, but also their capacity to focus on issues that go beyond day-to-day operations.

Implementation of programs or initiatives differed by sub-group in some other instances:

- Companies in British Columbia are more likely to report implementing environmental stewardship programs (57%), sustainable transportation programs (36%), employee retention policies (69%), and food waste reduction programs (77%).
- Atlantic-based companies mention implementing enhanced nutritional content programs (42%) less often.
- Ontario companies are less likely to implement enhanced animal welfare practices (15%), environmental stewardship (32%), and workforce diversity initiatives (41%).
- Companies based in Quebec are less likely to implement traceability systems (74%), sustainable packaging (48%), and energy efficient technology (32%).
- Newer companies in business for less than 5 years more often report implementing food waste reduction programs (74%) but are less likely to have assurance systems (43%), enhanced animal welfare practices (14%), or labour retention measures (48%).
- Companies that are not automated are less likely to implement traceability systems (66%), enhanced nutritional content (51%), and assurance systems (42%).
- There are a number of differences between product categories. Broadly speaking, companies processing grain-based (98%) and dairy products (100%) are more likely to implement public

trust initiatives. Beverage companies (89%) are more likely to report implementing environmental initiatives, and labour initiatives are more common for companies in the proteins category (85%).

Reasons for initiatives - tracking

While most companies rate all of the given reasons as important to some degree, meeting regulatory requirements and reducing costs are the reasons most often noted as “very important.”

When asked to consider a list of reasons for implementing initiatives like the ones mentioned in question 7, a majority of companies rate each reason as important to some degree (that is very or moderately important).

Looking specifically at those rating each reason as very important, there is more differentiation between reasons. Simply meeting regulatory requirements is the top reason in the list, with almost eight in ten companies (79%) saying it is very important. Cost also rates highly, with almost three in four companies (73%) calling it very important. Other reasons noted to be very important by a majority of companies include being the right thing to do (65%), to respond to buyer demands (63%), for market access (58%), and to mitigate environmental impacts (50%).

Importance of reasons for initiatives

Reasons	NET: Important	Very important	Moderately important	Not very important	Not important at all	Don't know / no response
To meet regulatory requirements	93%	79%	14%	5%	1%	1%
To reduce cost	94%	73%	21%	5%	1%	0%
Because it's the right thing to do	96%	65%	31%	2%	1%	1%
To respond to demands from the buyers you supply	88%	63%	26%	7%	3%	2%
To gain or maintain market access	88%	58%	30%	7%	3%	2%
To mitigate environmental impact	91%	50%	41%	7%	1%	1%
To avoid backlash / negative media / harmful public exposure	81%	48%	34%	11%	5%	3%
To respond to consumer demands or public pressure	86%	45%	41%	9%	3%	2%
To gain an advantage over competitors in your sector	81%	43%	38%	14%	4%	1%
To reduce likelihood of tighter regulations being imposed	72%	34%	38%	15%	8%	5%

Q8. There are many reasons why a company might decide to implement the types of initiatives I asked you about. I'm going to read you a number of reasons, and for each one, I'd like you to tell me how important a reason it would be to your company.

Looking at each reason across different sub-groups, some types of companies are more likely to list some reasons as very important to them:

- Meeting regulatory requirements is more important to companies based in Ontario (85%), organic companies (87%), automated companies (83%), companies making grain-based products (88%), fruit and vegetable (90%), and proteins (83%).
- Reducing cost is more important to companies in Manitoba and Saskatchewan (89%) and less important in Quebec (65%). Environmentally leaning companies are also more likely to say cost is very important (76%).
- Companies with 50 or more employees (76%) and environmentally leaning companies (72%) are more likely to say that doing the right thing is a very important reason to implement initiatives.
- Responding to buyer demands is rated very important more frequently by companies in business for 20 years or more (67%), certified organic companies (72%), and automated companies (66%).
- Maintaining market access is more important to automated companies (64% very important).
- Mitigating environmental impact is a more important reason for companies in British Columbia (62%), organic companies (61%), and environmentally leaning companies (58%).
- Avoiding backlash is a very important reason to a majority of companies based in Alberta (60%) and Ontario (54%).
- Responding to public pressure is more important to companies producing grain-based products (54%) and proteins (52%).
- Companies with 50 employees or more (57%), automated companies (48%), and environmentally leaning companies (47%) more often say that competitive advantage is very important; this is less important to companies based in British Columbia (29%) and dairy processors (27%).
- A majority of companies based in Manitoba and Saskatchewan (52%) and dairy processors (53%) say that reducing the likelihood of tighter regulations being imposed is very important. This reason is notably less important to companies that are not environmentally leaning (25%).

Through tracking of the past three waves of the survey, the results show that the reasons for implementing initiatives are generally stable compared to past figures. Note that the list of reasons was expanded and the wording of some items revised compared to previous waves.

Importance of reasons for initiatives – NET: Very / moderately important

Reasons	2022 (n=501)	2018 (n=400)	2017 (n=376)
Because it's the right thing to do	96%	93%	82%
To reduce cost	94%	-	-
To meet regulatory requirements	93%	-	-
To mitigate environmental impact	91%	-	-
To respond to demands from the buyers you supply*	88%	87%	81%
To gain or maintain market access**	88%	88%	85%
To avoid backlash / negative media / harmful public exposure	81%	81%	-
To respond to consumer demands or public pressure	86%	88%	77%
To gain an advantage over competitors in your sector	81%	85%	-
To reduce likelihood of tighter regulations being imposed	72%	76%	66%

Q8. There are many reasons why a company might decide to implement the types of initiatives I asked you about. I'm going to read you a number of reasons, and for each one, I'd like you to tell me how important a reason it would be to your company.

* Asked as "To respond to demands from the businesses you supply" in 2017-2018.

** Asked as "To maintain market access" in 2017-2018.

Barriers to environmental sustainability measures

When asked to name barriers to implementing environment initiatives, businesses mention cost most often on an open-ended basis.

In an open-ended question, cost (51%) is the most widely identified barrier to implementing environmental sustainability measures. Other barriers are mentioned considerably less frequent overall, and almost one in five (18%) say there are not any barriers for them.

Barriers to implementing environmental sustainability measures

Barriers	Food & beverage processors (n = 501)
Financial barriers / not enough money	51%
Lack of infrastructure	15%
Lack of corporate expertise / lack of knowledge / don't know how	7%
Lack of alternative options for packaging	6%
Lack of time / takes too long / no time to learn	6%
Regulatory barriers (for example, labelling)	4%
Lack of workers/ staffing issues	4%
Need of government support	3%
Return on investment is poor	3%
It's just not a priority at this time	1%
Pandemic has made everything hard / pandemic is a priority right now	<1%
Other	4%
Don't know/no response	10%
No barriers	18%

Q11. What, if any, are the barriers to implementing environmental sustainability measures for your company?

Barriers to environmental measures are relatively consistent between sub-groups:

- Cost was noted as a barrier more often by beverage companies (61%), and less often by companies with 50 employees or more (38%), and those in business for 20 years or more (45%).
- Companies earning less than \$250K and those at the other end of the revenue scale earning \$5M or more were less likely to name cost as a barrier (44%) compared to companies at other revenue levels in between. This may reflect that smaller operations face less complexity in implementing measures, while very high revenue companies have greater financial capacity to do so.
- Companies earning \$5M or more (31%) are more likely to say they face no barriers.

Food waste causes

Quality and equipment issues are the most common reasons for food waste in processing, with six in ten companies (60%) saying each contributes a lot or a little.

When asked to consider eight common causes of food waste that can occur in processing, quality (61%), equipment issues (59%), and inaccurate forecasting (49%) are seen to contribute to food waste (a lot or a little) by a majority of companies. These results suggest that quality, breakdowns, and forecasting issues are common in food and beverage processing, while other items on the list vary in relevance depending on the type of processing a company does.

Focusing on food waste causes that are seen to contribute a lot, inadequate labour capacity caps the list at 22 percent, though it ranks much lower when a lot or a little responses are combined. Shipping delays also rank highly among causes that are seen to contribute a lot (19%).

Contribution of food waste causes

Causes of food waste	NET: Contributes a lot / a little	Contributes a lot	Contributes a little	Does not contribute	Don't know / prefer not to say
Poor quality item / rejection due to quality standards	60%	16%	45%	39%	1%
Equipment issues or breakdowns	58%	18%	41%	41%	1%
Inaccurate supply and demand forecasting	49%	19%	31%	50%	1%
Inability to repurpose or reincorporate off-spec products	45%	14%	31%	51%	4%
Shipping delays	45%	19%	26%	55%	1%
Inadequate labour capacity due to COVID 19 or other issues	44%	22%	23%	54%	1%
Production line changes	39%	9%	30%	59%	3%
Trimming and culling	36%	9%	27%	54%	9%

Q12. I'm going to name some different causes of food waste that can occur in processing. For each one, tell me if it contributes a lot, contributes a little, or does not contribute to food waste in your company's operations.

Looking at causes that contribute a lot to food waste by sub-groups shows areas where some types of processors feel these causes more acutely:

- Those more likely to say labour issues contributes a lot to food waste include those with 50 or more employees (41%), those in business for 20 years or longer (25%), and environmentally leaning companies (26%).
- Shipping delays are noted more often by companies in Alberta (41%), Manitoba and Saskatchewan (36%), companies earning \$5M or more (31%), and companies making grain-based products (24%).

- Inaccurate supply forecasting is noted more often by companies based in Manitoba and Saskatchewan (28%) and environmentally leaning companies (22%).
- Manitoba and Saskatchewan based companies also note equipment issues (33%) more often than others.
- Poor quality items or quality standards are mentioned more by those based in Manitoba and Saskatchewan (28%) and producers of other products (25%).
- Inability to repurpose off-spec products is quite variable by region; companies in Alberta (28%), Manitoba and Saskatchewan (31%) and Quebec (18%) more often say this contributes a lot. Companies making other products also note this issue more often (21%).
- Production line changes are a bigger factor for companies in business for 20 years or more (11%) and those earning \$5M or more (18%).
- Trimming and culling is more often noted by companies in Manitoba and Saskatchewan (18%) and Quebec (14%), and by those processing fruit and vegetables (21%) and proteins (14%).

Practices to reduce food loss and waste

Process optimization or waste assessments are the most common food waste reduction strategies mentioned by companies.

Nearly half of companies (48%) say they use process optimization or waste assessments, when asked on an open-ended basis how they manage and reduce food waste in their operations. Other solutions, like diversion to animal feed or developing new products, are mentioned less often. Just over one in five (21%) say they have not done anything to manage or reduce food waste.

Practices to reduce food loss and waste in operations

Practices	Food & beverage processors (n = 501)
Process optimization and/or waste assessments	48%
Diversion to animal feed products	8%
Development of new food products	7%
Implemented new technology (such as, food traceability)	6%
Composting	6%
Enhanced employee training	5%
Donate extra food or product (for example, to shelters)	5%
Optimizing supply chain (for example, reducing transportation time)	4%
Improved cold storage	4%
Sustainable packaging	3%
Biofuels, biochemicals and biomaterial	<1%
Other	2%
Have not done anything to manage or reduce food waste	21%
Don't know/Prefer not to say	7%

Q13. What, if any, practices does your company have in place to manage or reduce food loss and waste?

Feasibility and specific methods for managing food waste vary; notable sub-group differences in food waste management are listed below:

- Process optimization is mentioned more often by companies based in Manitoba and Saskatchewan (62%), automated companies (53%), and environmentally leaning companies (52%).
- Companies based in Manitoba and Saskatchewan are more likely to divert waste to animal food products (20%).
- Employee training is mentioned more often by companies with 50 or more employees (15%), and those in business for 20 years or more (9%).

- Companies making products in the other category are more likely to say they donate surplus food (13%).
- Those more likely to say they have not done anything to manage food waste include companies with fewer than 25 employees (25%), those based in Ontario (27%) and Quebec (23%), companies with revenue less than \$250K (29%), companies that are not automated (29%), those that are not environmentally leaning (29%), and beverage producers (26%).

Barriers to food waste reduction measures

The top barrier to further efforts to reduce food waste is financial, but many companies say they have no barriers (22%) or are unable to identify any concrete barriers (28%) to further food waste reduction or prevention.

Financial barriers (23%) and staffing issues (11%) are the barriers mentioned most often by companies when asked an open-ended question about what prevents them from implementing further practices to manage food waste. Other barriers like lack of infrastructure (8%), lack of knowledge (5%), and lack of time (4%) are mentioned less often. Over one in five (22%) say they have no barriers, and almost three in ten (28%) could not answer the question.

Barriers to implementing food waste reduction

Barriers	Food & beverage processors (n = 501)
Financial barriers / not enough money	23%
Lack of workers / staffing issues	11%
Lack of infrastructure	8%
Lack of corporate expertise / lack of knowledge / don't know how	5%
Lack of time / takes too long / no time to learn	4%
Regulatory barriers	3%
It's just not a priority at this time	3%
Pandemic has made everything hard / pandemic is a priority right now	2%
Other	8%
No barriers	22%
Don't know/Prefer not to say	28%

Q14. What, if any, are the barriers to implementing further practices in your company to manage and reduce food loss and waste?

While mentions of barriers to food waste management were relatively uniform across sub-groups, there are some noteworthy differences:

- Financial barriers are noted more often by companies based in British Columbia (36%), and less often by companies in business for 20 years or more (15%).

- As seen in the environmental sustainability barriers question, companies at opposite ends of the revenue spectrum are less likely to mention cost as a barrier compared to companies in between 18 percent for under \$250K and 19 percent for \$5M or more.
- Staff issues are mentioned less often by Ontario-based companies (6%).
- Companies based in Ontario (25%) and Quebec (29%), and those with fewer than 25 employees (24%) are more likely to say they have no barriers to implementing further practices to reduce food waste.

2. Canadian Agricultural Partnership

Awareness and impression of Canadian Agricultural Partnership - tracking

Awareness of the Canadian Agricultural Partnership is somewhat lower in 2022 compared to the 2018 wave; however, those aware of the program are now more likely to express positive impressions of it.

The Canadian Agricultural Partnership is a five year investment by federal, provincial and territorial governments to strengthen and grow Canada's agriculture and agri-food sector. One in five companies (20%) say they are aware of the partnership, a decline compared to the 2018 to 2019 wave of the study when more than one in four (26%) recalled hearing about it. This question was not asked in the 2017 wave.

Though awareness is somewhat lower, impressions of the program are strong among those who recall it; three in four (75%) say their impression is very or somewhat positive. This is a notable increase compared to the previous wave, when just over four in ten (42%) said their impression of the partnership was positive. A hypothesis for this shift in awareness and impressions is that the Partnership was subject to more discussion at its outset in 2018, but may have faded from view in the time since. It is also possible that the program is being mistaken for assistance programs that have been created to help companies cope with pandemic-related challenges.

Canadian Agricultural Partnership awareness tracking

Aware of Canadian Agricultural Partnership	2022 (n = 501)	2018 (n = 400)
Yes	20%	26%
No	80%	74%

Q15. Have you seen, heard or read anything about the Canadian Agricultural Partnership?

Note: Don't know responses have been removed for comparison with past data.

Canadian Agricultural Partnership impressions tracking

Impression of Canadian Agricultural Partnership	2022 (n = 84)	2018 (n = 101)
NET: Positive	75%	42%
Very positive	29%	16%
Somewhat positive	46%	26%
Neither positive or negative	20%	37%
Somewhat negative	5%	15%
Very negative	0%	6%

Q16. What's your overall impression of the Canadian Agricultural Partnership?

Awareness of the Canadian Agricultural Partnership is lower in Quebec (8%), among companies in business for 5 to 20 years (12%), in those that are not automated (10%), companies that are not environmentally leaning (11%), and companies in the other category of processing (9%). Among companies aware of the program, sample sizes preclude meaningful comparison of impressions between sub-groups.

3. Profile of food and beverage processors

Company location and size - tracking

About six in ten (61%) of companies have their headquarters in Ontario or Quebec, and most are small operations, almost three in four (73%) have less than 25 full-time employees (or equivalent).

Region and company size are generally consistent; additional categories were added this wave to see more nuance in the <100 category.

Province / territory

Location of headquarters	2022 (n = 501)	2018 (n = 400)	2017 (n = 376)
British Columbia	17%	17%	17%
Alberta	8%	6%	8%
Saskatchewan	3%	4%	4%
Manitoba	3%	2%	3%
Ontario	36%	36%	36%
Quebec	25%	27%	25%
Prince Edward Island	1%	1%	1%
New Brunswick	2%	2%	2%
Nova Scotia	3%	4%	4%
Newfoundland	1%	1%	2%

Q1. To start, in which province or territory is your company's headquarters located?

Company size

Employees in Canada	2022 (n = 501)	2018 (n = 400)	2017 (n = 376)
NET: Under 100	94%	91%	86%
Up to 24	73%	-	-
25 to 49	15%	-	-
50 to 74	4%	-	-
75 to 99	2%	-	-
100 to 249	3%	5%	3%
NET: 250+	1%	2%	11%
250 to 499	1%	2%	-
500 to 999	<1%	<1%	-
1000 or more	<1%	<1%	-
Don't know/no response	2%	<1%	<1%

Q17. How many employees work for your company in Canada? Please include part-time employees as full-time equivalents.

Revenue and time in business - tracking

More than two in three companies (67%) have operated for 10 years or more and most earn less than \$5M per year.

In terms of revenue, food and beverage processors are diverse. Nearly half (47%) earn less than \$1M per year, and about one in four (24%) earn between \$1M and \$5M. About half of companies (49%) have been in business for 20 years or longer; and newcomers with less than 5 years (15%).

Revenue break-downs are generally similar to 2018 and 2017 where comparable; the previous waves of the survey had fewer categories for revenue. The 2022 wave of the survey had somewhat higher proportions of newer companies compared to 2018.

Annual revenue

Total revenues in last fiscal year	2022 (n = 501)
Less than \$250K	18%
\$250K to less than \$500K	12%
\$500K to less than \$750K	10%
\$750K to less than \$1 million	7%
\$1 million to less than \$5 million	24%
\$5 million to less than \$10 million	5%
\$10 million to less than \$25 million	4%
\$25 million to less than \$50 million	2%
\$50 million to less than \$100 million	1%
\$100 million or more	1%
Don't know/no response	17%

Q18. In your last fiscal year, what were your company's total revenues?

Annual revenue – tracking (Don't know category removed)

Total revenues in last fiscal year	2022 (n = 501)	2018 (n = 400)	2017 (n = 376)
Less than \$10 million	90%	86%	82%
\$10 million or more	10%	15%	19%

Q18. In your last fiscal year, what were your company's total revenues?

Years in business

Years in business	2022 (n = 501)	2018 (n = 400)	2017 (n = 376)
Less than 1 year	1%	<1%	<1%
1 year to less than 5 years	15%	11%	9%
5 years to less than 10 years	17%	14%	11%

10 years to less than 20 years	18%	23%	21%
20 years to less than 30 years	19%	23%	25%
30+ years	30%	29%	35%
Don't know/no response	<1%	1%	-

Q3. Approximately how long has your company been in the food or beverage processing business?

Type of processing facility - tracking

One in four companies are in alcoholic beverage manufacturing.

Companies responding to the survey operate in a wide range of areas, with alcoholic beverage manufacturing (25%) and bakery and tortilla manufacturing (11%) as the most common.

In the 2018 wave, half of all companies (50%) were in an unspecified “Other” category. In the 2022 wave, categories were expanded, and companies saying “Other” were asked to specify what type of facility they operate. The relatively high proportion of companies in the alcoholic beverage category in 2022 were likely contained within the unspecified “Other” category in 2018. This question was not asked in 2017.

Type of facility

Type of facility	2022 (n = 501)	2018 (n = 400)
Alcoholic Beverage Manufacturing	25%	-
Bakeries and Tortilla Manufacturing	11%	11%
Sugar and Confectionary Product Manufacturing	8%	8%
Seafood Product Preparation and Packaging	6%	4%
Animal (except poultry) Slaughtering	6%	4%
Animal Food Manufacturing	6%	5%
Dairy Product Manufacturing	5%	6%
Fruit and vegetable preserving and specialty food manufacturing	5%	-
Grain and Oilseed Milling	5%	9%
Non-alcoholic Beverage Manufacturing	5%	-
Rendering and Meat Processing from Carcasses	4%	3%
Food processing or manufacturing (general)	4%	-
Maple syrup	3%	-
Poultry Processing	2%	1%
Sauce manufacturing	1%	-
Noodle and pasta manufacturing	1%	-
Other	9%	50%

Don't know/no response	1%	-
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Q4. What type of processing facility does your company operate?

Processor type is, predictably, dependent on geography, with grain products and animal feed largely processed in Manitoba and Saskatchewan, seafood handled in the Atlantic provinces, and other types of manufacturing more concentrated in Ontario and Quebec.

For the purposes of sub-group analysis, these categories were combined into six broader categories: grain-based, fruit and vegetable, beverage, dairy, protein, and other products. These are defined in the about section of the report.

Automation - tracking

A majority of companies are partially automated.

More than six in ten (62%) companies are partially automated, while few say they are fully automated (2%) and about three in ten (34%) are not automated. This is consistent with 2018.

Automation

Level of automation	2022 (n = 501)	2018 (n = 400)	2017* (n = 376)
Not automated	34%	33%	20%
Partially automated	62%	62%	75%
Fully automated	2%	6%	4%
Don't know/no response	1%	2%	1%

Q5. How would you describe your company's manufacturing in terms of the current level of automation?

* 2017 questionnaire had additional categories for "Mostly" and "Minimally" automated that have been combined with "Partially automated" for comparison.

Automation is more common in companies that have more than 100 employees (86%), that have annual revenue exceeding \$5M (88%), and in companies that are certified organic (85%).

Organic certification

Four in five (80%) companies are not organic certified or seeking certification.

Most companies are not organic certified (80%); few are in the process of getting that certification (3%) and under one in five (16%) are organic certified.

Organic certified processing

Organic certified or in process of obtaining certification	Food & beverage processors (n = 501)
Yes – organic certified	16%

Yes – in process of obtaining organic certification	3%
No	80%
Don't Know/Prefer not to say	1%

Q19. Is your processing operation organic certified or in the process of receiving organic certification?

Organic certification is more common in high revenue companies earning \$5M or more (34%) and in companies that are automated (22%). Alberta-based companies are less likely to be certified (8%).

Company ownership by members of equity-seeking groups

More than one in three (35%) Canadian food and beverage processors are majority owned by members of equity-seeking groups, most often women.

In total, about over in three businesses (35%) are majority-owned by an individual or individuals who identify as a member of at least one equity-seeking group. This includes companies owned by women (29%), members of visible minorities (8%), individuals who identify as LGBTQ2+ (2%), Indigenous people (1%) and people with disabilities (1%).

Ownership by identity / members of equity-seeking groups

Ownership identity	Food & beverage processors (n = 501)
NET: Owned by a member of at least one equity-seeking group	35%
Indigenous peoples, that is, First Nations, Metis, or Inuit	1%
People with disabilities	1%
Visible minorities	8%
Women	29%
Individuals who identify as LGBTQ2+	2%
None of the above	60%
Don't Know/Prefer not to say	5%

Q20. Is this company majority-owned (51 percent or more) by an individual or individuals in any of the following groups?

Ownership by members of equity-seeking groups is more common in small companies with fewer than 100 employees (36%), and less common in companies with annual revenues exceeding \$5 million (19%).

4. Respondent profile

Characteristics of the individuals who responded to the survey are outlined below.

Respondent gender

Gender	Food & beverage processors (n = 501)
Male	61%
Female	39%

Q22. Gender (assigned by interviewer based on voice)

Survey language

Language of survey	Food & beverage processors (n = 501)
English	76%
French	24%

Q21. Language of interview

Position in company

Position	Food & beverage processors (n = 501)
CEO/Owner/President (NET)	56%
CEO	4%
Owner/Operator	38%
President	13%
VP Level (NET)	3%
VP, Operations	3%
VP, Business Strategy	<1%
VP, Marketing	<1%
Director/Operations/Other (NET)	41%
Director (for example, finance and marketing)	11%
Operations (for example, supervisor and manager)	28%
Other	2%
Don't know/no response	<1%

Q2. What is your position within the company?

III. Conclusion

The results of this survey demonstrate that Canada's food and beverage processors are facing a range of challenges and managing a number of different, and potentially competing priorities. Some of these, like supply chain issues and labour concerns, have been worsened by the COVID-19 pandemic, and are affecting businesses across many industry sectors.

Other priorities and concerns are more long-standing. Processors continue trying to monitor, build, and protect public trust in their products and their operations over the long term, even while other imminent needs command their attention.

Though most processors indicate they have taken some action to bolster their public trust, improve their impact on the environment, strengthen their workforces, and reduce food waste, they have difficulty elaborating on the barriers that prevent them from taking more action, and most often name cost as the factor standing in their way. This lack of insight on the part of the processors poses a challenge to AAFC in its mandate to support processors in these goals.

While the survey results indicate in some detail what processors are prioritizing and why, the telephone survey methodology has limitations for exploring these issues in depth. AAFC's understanding of food and beverage processors could be strengthened through additional qualitative research. In-depth interviews with a cross-section of processors would give deeper insight into the priorities, initiatives, and barriers explored in this survey. This type of qualitative research could also uncover other issues not readily apparent in survey results and, if done in tandem with future survey waves, it could lead to new lines of questioning for the quantitative research.

IV. Appendix A: Methodology

Environics Research conducted a telephone survey with 501 Canadian food or beverage processors or manufacturers, drawn from a sample list of 6,553 companies. Specifically, the survey was conducted with adults (18+) at these companies who have responsibility for business strategy and/or operations. The response rate for the survey was 10.8% and the margin of error for this sample is +/-4.1%.

Sample design, weighting and respondent profile

Environics conducted a 15 minute telephone survey from February 10 to March 4, 2022. The sampling method was designed to attain interviews with at least 400 companies based on predicted response rates; due to strong response rates, the final sample achieved was 501 companies.

The sample frame for this study was a list of food and beverage processors from Dun & Bradstreet Canada. Eligible processors were defined as companies with headquarters in Canada, operating under Standard Industrial Classification (SIC) Code 20. After cleaning the list to remove duplicates and defunct entries, the list contained 6,553 eligible records. A complete list of eligible SIC codes is shown below:

SIC Code	Description	SIC Code	Description
2011	Meat Packing Plants	2062	Cane Sugar Refining
2013	Sausages and Other Prepared Meat Products	2063	Beet Sugar
2015	Poultry Slaughtering and Processing	2064	Candy and Other Confectionary Products
2021	Creamery Butter	2066	Chocolate and Cocoa Products
2022	Natural, Processed, and Imitation Cheese	2067	Chewing Gum
2023	Dry, Condensed, and Evaporated Dairy Products	2068	Salted and Roasted Nuts and Seeds
2024	Ice Cream and Frozen Desserts	2074	Cottonseed Oil Mills
2026	Fluid Milk	2075	Soybean Oil Mills
2032	Canned Specialties	2076	Vegetable Oil Mills,
2033	Canned Food Stuff	2077	Animal and Marine Fats and Oils
2034	Dried and Dehydrated Fruits	2079	Shortening, Table Oils, Margarine, Edible Fats
2035	Pickled Food Stuff	2082	Malt Beverages
2037	Frozen Fruits, Fruit Juices, and Vegetables	2083	Malt
2038	Frozen Specialties, Not Elsewhere Classified	2084	Wines, Brandy, and Brandy Spirits
2041	Flour and Other Grain Mill Products	2085	Distilled and Blended Liquors
2043	Cereal Breakfast Foods	2086	Bottled and Canned Carbonated Drinks
2044	Rice Milling	2087	Flavoring Extracts and Flavoring Syrups
2045	Prepared Flour Mixes and Doughs	2091	Canned and Cured Fish and Seafoods
2046	Wet Corn Milling	2092	Prepared Fresh or Frozen Fish and Seafoods
2047	Dog and Cat Food	2095	Roasted Coffee
2048	Prepared Feed and Feed Ingredients	2096	Potato Chips, Corn Chips, and Similar Snacks
2051	Bread and Other Bakery Products	2097	Manufactured Ice
2052	Cookies and Crackers	2098	Macaroni, Spaghetti, Vermicelli, and Noodles
2053	Frozen Bakery Products, Except Bread	2099	Food Preparations, Not Elsewhere Classified
2061	Cane Sugar, Except Refining		

No quotas were set for any business characteristics or region. While the survey was open to respondents from all regions of Canada, the sample did not obtain any respondents from the territories.

The final survey data were weighted to match company size and region proportions in the source list. Note that in the original list, the proportion of companies with no size data was over 15 percent, while the unweighted sample was 2 percent. For weighting purposes, the “no data” proportion was kept at 2 percent and other proportions were adjusted accordingly.

The survey obtained the following distribution:

Variable	Percent of population (source list)	Percent of sample	Actual Unweighted	Actual Weighted*
Headquarters location				
Atlantic	8	9	43	40
Quebec	25	40	199	125
Ontario	36	28	140	179
Manitoba / Saskatchewan	6	8	39	28
Alberta	8	6	29	41
British Columbia	17	10	51	86
Canada	100	100	501	501
Company Size (number of employees)				
Under 100	81	90	450	467
100 to 249	2	4	20	13
250 to 499	1	2	10	4
500 to 999	<1	1	3	1
1000+	<1	2	8	2
No Data	15	2	10	12
Total	100	100	501	501

*Results are weighted by region and company size to source list of 6,553 food and beverage manufacturers.

Questionnaire design

AAFC provided Environics with desired topic areas and questions that addressed the research objectives. Environics then designed a questionnaire that incorporated these questions, advising on best practices in question design, particularly for telephone and B2B surveys. Upon approval of the English questionnaire, Environics arranged for the questionnaire to be translated into French by professional translators.

Environics' data analysts programmed the questionnaires, then performed thorough testing to ensure accuracy in set-up and data collection. This validation ensured that the data entry process conformed to the surveys' basic logic. The data collection system handles sampling invitations, quotas and questionnaire completion (skip patterns, branching, and valid ranges).

Prior to finalizing the survey for fieldwork, a pre-test (soft launch) was conducted in English and French. The pre-test assessed the questionnaires in terms of question wording and sequencing, respondent sensitivity to specific questions and to the survey overall, and survey length. Standard Government of Canada pre-testing questions were also asked. As no changes were required following the pre-test, the ten responses have been included in the final data set.

The final survey questionnaire is included in Appendix B.

Fieldwork

The survey was conducted by Environics using a secure, fully featured Computer Assisted Telephone Interviewing (CATI) environment. The average interview length was 14.9 minutes.

All respondents were offered the opportunity to complete the surveys in their official language of choice. All research work was conducted in accordance with the Standards for the Conduct of Government of Canada Public Opinion Research – Telephone Surveys and recognized industry standards, as well as applicable federal legislation (*Personal Information Protection and Electronic Documents Act*, or PIPEDA).

Following data collection, the data from this survey were statistically weighted by region and company size, to match proportions in the original source list.

Completion results

The completion results are presented in the following table.

Contact disposition

Total Numbers Attempted	6553
Out-of-scope - Invalid	858
Unresolved (U)	2281
No answer/answering machine	2281
In-scope - Non-responding (IS)	1594
Language barrier	40
Incapable of completing	105

Callback (Respondent not available)	1449
Total Asked	1820
Refusal	1161
Termination	42
In-scope – Responding	617
Completed interview	501
NQ - Not a company in the business of food or beverage processing	116
Refusal Rate	66.10%
Response Rate	10.83%
Incidence (Overall)	81.20%

V. Appendix B: Questionnaire

2021-22 Food & Beverage Processors Strategic Issues Survey (Wave III)

Introduction

Hello/Bonjour, my name is [Interviewer's name]. I'm calling on behalf of Environics, a public opinion research company. Would you prefer that I continue in English or French? Préférez-vous que je continue en français ou en anglais? We're conducting a survey with food and beverage processors about important issues facing the Canadian agriculture and food sector, on behalf of Agriculture and Agri-Food Canada.

Just to confirm, is this company in the business of food or beverage processing?

- if yes, continue. repeat introduction if needed.
- if not, terminate.

May I speak to the person in your company responsible for business strategy and/or operations. Would this be you or someone else?

- if person is available, continue. repeat introduction if needed.
- if not available, schedule call-back.

The survey takes up to 15 minutes. Your participation is voluntary and your decision to participate or not will not affect any dealings you may have with the Government of Canada in any way. Your identity and individual answers will be kept strictly confidential. Any information you provide will be administered in accordance with the Privacy Act and other applicable privacy laws.

May I continue?

- Yes, now [Continue]
- No, call later. Specify date/time: Date: Time:
- Refused [Thank/Discontinue]

Interviewer Notes:

Note: If a respondent asks you about the legitimacy of this project or if the respondent wants to make a complaint or a comment about this project, they may call 1- 613-230-5089.

Note: If a respondent requests to speak with a study leader at Agriculture and Agri-Food Canada, please take his / her name and phone number and mention that Agriculture and Agri-Food Canada will contact them.

Business Profile

To start,

1. In which province or territory is your company's headquarters located? [Tracking 2019](#)
 01. Newfoundland
 02. Nova Scotia
 03. Prince Edward Island
 04. New Brunswick
 05. Quebec
 06. Ontario
 07. Manitoba
 08. Saskatchewan
 09. Alberta
 10. British Columbia
 11. Northwest Territories
 12. Yukon
 13. Nunavut
 14. Headquarters are not in Canada Thank/Terminate
 99. Don't know/no response

2. What is your position within the company? [Do not read list; Accept 1 response] [Tracking 2019](#)
 01. VP, Operations
 02. VP, Business Strategy
 03. VP, Marketing
 04. CEO
 05. Owner or Operator
 06. President
 07. Director (for example, finance and marketing)
 08. Operations (for example, supervisor or manager)
 88. Other, please specify

3. Approximately how long has your company been in the food or beverage processing business?
[Do not read list] [Tracking 2019](#)
 01. Less than 1 year
 02. 1 year to less than 5 years
 03. 5 years to less than 10 years
 04. 10 years to less than 20 years
 05. 20 years to less than 30 years
 06. 30+ years
 99. Don't know/no response

4. What type of processing facility does your company operate? [Do not read list, multiple response] [Tracking 2019](#)

01. Animal Food Manufacturing
 02. Grain and Oilseed Milling
 03. Sugar and Confectionary Product Manufacturing
 04. Fruit and vegetable preserving and specialty food manufacturing
 05. Non-alcoholic Beverage Manufacturing
 06. Alcoholic Beverage Manufacturing
 07. Dairy Product Manufacturing
 08. Animal (except poultry) Slaughtering
 09. Rendering and Meat Processing from Carcasses
 10. Poultry Processing
 11. Seafood Product Preparation and Packaging
 12. Bakeries and Tortilla Manufacturing
 13. Other Food Manufacturing, Specify _____
 99. Don't know/no response
5. How would you describe your company's manufacturing in terms of the current level of automation? [Read list] [Tracking 2019](#)
01. Not automated
 02. Partially automated
 03. Fully automated
 99. Don't know/no response
6. Thinking about the past two years, please tell me if each of the following has been a high, medium or low priority for your company. [Randomize]
- a) Addressing public perception, image, and trust. Public trust refers to consumers' confidence on issues such as food safety, animal welfare, and the sector's reliability and competence
 - b) Addressing supply chain issues
 - c) Addressing labour issues, such as capacity and retention
 - d) Reducing food loss and waste created during processing
 - e) Improving environmental sustainability
 - f) Improving equity, diversity, and inclusion
01. Low Priority
 02. Medium Priority
 03. High Priority
 04. Don't know/Prefer not to say (Volunteered)

Public Trust

7. Which of the following programs or initiatives has your company implemented? If something does not apply to your company, please say so. [Randomize and Read List] [Tracking 2019](#)

Environment [Do not read]

- 01. Environmental stewardship programs
- 02. Water conservation measures
- 03. Sustainable packaging programs
- 04. Installing energy efficient technology, such as energy efficient chillers
- 05. Using clean energy, like wind or solar, to power your operations
- 06. Sustainable transportation programs
- 07. Climate adaptation strategy

[If asked: Climate change adaptation refers to actions that reduce the negative impact of climate change, while taking advantage of potential new opportunities. It involves adjusting policies and actions because of observed or expected changes in climate.]

Food Waste [Do not read]

- 08. Food loss and waste reduction programs

Labour Issues [Do not read]

- 09. Workforce diversity and inclusion program
- 10. Policies to address employee retention and absenteeism

Public Trust [Do not read]

- 11. Enhanced animal welfare practices
- 12. Enhanced nutritional content/healthy ingredients
- 13. Traceability System
- 14. Assurance systems like organic, kosher, or sustainably sourced

- 01. Yes
- 02. No
- 03. Not applicable

8. [If yes to any] There are many reasons why a company might decide to implement the types of initiatives I asked you about. [If needed, remind respondents of the Q7 items by saying: Recall that this included things like environmental stewardship, labour, food waste and sustainability programs.] I'm going to read you a number of reasons, and for each one, I'd like you to tell me how important a reason it would be to your company. The first one is ...[Read list; randomize]. Would you say this reason is... [Read scale]...? [Tracking 2019](#)

- a. To respond to consumer demands or public pressure
- b. To respond to demands from the buyers you supply
- c. To gain or maintain market access
- d. To reduce the likelihood of tighter regulations being imposed in each of these areas
- e. Because it's the right thing to do
- f. To avoid backlash, negative media or otherwise harmful public exposure
- g. To gain an advantage over competitors in your sector
- h. To mitigate environmental impact
- i. To meet regulatory requirements

- j. To reduce cost
- 01. Not important at all,
 - 02. Not very important,
 - 03. Moderately important or
 - 04. Very important.
 - 99. Do not read: Don't know/no response
9. What, if any, are the barriers to implementing environmental sustainability measures for your company? [Do not read]
- 01. Financial barriers / not enough money
 - 02. Return on investment is poor
 - 03. Lack of alternative options for packaging
 - 04. Lack of infrastructure
 - 05. Lack of workers/ staffing issues
 - 06. Lack of corporate expertise / lack of knowledge / don't know how
 - 07. Lack of time / takes too long / no time to learn
 - 08. It's just not a priority at this time
 - 09. Need of government support
 - 10. Regulatory barriers (for example, labelling)
 - 11. Pandemic has made everything hard / pandemic is a priority right now
 - 12. No barriers
 - 13. Other [Interviewer type in] _____

Food Waste

We'd like to know a bit about how your company thinks about and addresses food waste issues.

10. I'm going to name some different causes of food waste that can occur in processing. For each one, tell me if it contributes a lot, contributes a little, or does not contribute to food waste in your company's operations?

- a) Shipping delays
- b) Equipment issues or breakdowns
- c) Inability to repurpose or reincorporate off-spec products
- d) Inaccurate supply and demand forecasting
- e) Production line changes
- f) Trimming and culling
- g) Inadequate labour capacity due to Covid 19 or other issues
- h) Poor quality item / rejection due to quality standards

- 01. Contributes a lot
- 02. Contributes a little
- 03. Does not contribute to food waste
- 04. Don't know/Prefer not to say (Volunteered)

11. What, if any, practices does your company have in place to manage or reduce food loss and waste? [Do not read list]

- 01. Composting
- 02. Development of new food products
- 03. Diversion to animal feed products
- 04. Biofuels, biochemicals and biomaterial
- 05. Process optimization and/or waste assessments
- 06. Implemented new technology (such as, food traceability)
- 07. Sustainable packaging
- 08. Optimizing supply chain (reducing transportation time)
- 09. Improved cold storage
- 10. Enhanced employee training
- 11. Other, specify _____
- 12. Have not done anything to manage or reduce food waste.

12. What, if any, are the barriers to implementing further practices in your company to manage and reduce food loss and waste? [Do not read]

- 01. Financial barriers / not enough money
- 02. Lack of infrastructure
- 03. Lack of workers / staffing issues
- 04. Lack of corporate expertise / lack of knowledge / don't know how
- 05. Lack of time / takes too long / no time to learn
- 06. It's just not a priority at this time

- 07. Regulatory barriers
- 08. Pandemic has made everything hard / pandemic is a priority right now
- 09. Other [Interviewer type in] _____

AAFC Initiatives

Changing topics,

13. Have you seen, heard or read anything about the Canadian Agricultural Partnership? [Tracking 2019](#)

- | | | |
|-----|-------------|-------------|
| 01. | Yes | |
| 02. | No | Skip to Q27 |
| 03. | Not sure | Skip to Q27 |
| 99. | No response | Skip to Q27 |

14. What's your overall impression of the Canadian Agricultural Partnership? [Read list] [Tracking 2019](#)

- 01. Very positive
- 02. Somewhat positive
- 03. Neither positive or negative
- 04. Somewhat negative
- 05. Very negative
- 99. Do not read: Don't know/prefer not to say

Firmographic Characteristics

Lastly, we have a few questions about your company.

15. How many employees work for your company in Canada? Please include part-time employees as full-time equivalents. [Do not read list] [Tracking 2019](#)

- 01. Up to 24
- 02. 25 to 49
- 03. 50 to 74
- 04. 75 to 99
- 05. 100 to 249
- 02. 250 to 499
- 03. 500 to 999
- 04. 1000 or more
- 99. Don't know/no response

16. In your last fiscal year, what were your company's total revenues? [Read list; Stop when respondent answers] [Tracking 2019](#)

01. Less than \$250K
02. \$250K to less than \$500K
03. \$500K to less than \$750K
04. \$750K to less than \$1 million
05. \$1 million to less than \$5 million
06. \$5 million to less than \$10 million
07. \$10 million to less than \$25 million
08. \$25 million to less than \$50 million
09. \$50 million to less than \$100 million
10. \$100 million or more
99. Don't know/no response

17. Is your processing operation organic certified or in the process of receiving organic certification?

[Code one response]

01. Yes, organic certified
02. Yes, in process of obtaining organic certification
03. No
04. Don't Know/Prefer not to say

18. Is this company majority-owned (51 percent or more) by an individual or individuals in any of the following groups?

01. Indigenous peoples, that is, First Nations, Metis, or Inuit
02. People with disabilities
03. Visible minorities
04. Women
05. Individuals who identify as LGBTQ2+
06. None of the above

19. Language of interview – Record, do not ask.

01. English
02. French

20. Sex – Record, Do not ask.

01. Male
02. Female

Thank you very much for your time and participation. The results of the research will be available to the general public, on the Library and Archives website, in the coming months.