

2021



At the
Crossroad
to
Greatness

Key Insights & Labour Market Research
About Canada's Food and
Beverage Processing Industry



Available online at www.fpsc-ctac.com

This project is funded by the Government of Canada's Sectoral Initiatives Program

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ISBN: 978-1-989541-61-6

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Food Processing Skills Canada (FPSC)
201-3030 Conroy Road
Ottawa (Ontario) K1G 6C2



ABOUT US

Food Processing Skills Canada (FPSC) is the food and beverage manufacturing industry's workforce development organization. As a non-profit, located in Ottawa with representatives across Canada, we support food and beverage manufacturing businesses from coast to coast in developing skilled and professional employees and workplace environments.

Our work directly and positively impacts industry talent attraction, workforce retention and employment culture. We care about assisting the industry in finding, training and retaining the very best people for the job. Through our partnerships with industry, associations, educators and all levels of governments in Canada, FPSC has developed valuable resources for the sector including the **Food Skills Library™**, **Canadian Food Processors Institute™**, **FoodCert™** and Labour Market Information Reports.



Canada 

Welcome

"This report confirms what businesses across Canada are experiencing – a serious challenge in finding and retaining workers, especially during this difficult time. I encourage all employers to review the recommendations of this report and adopt updated human resource strategies and employment culture best practices which are both key factors in solving the workforce crisis."

— Mike Timani
Chairman of the Board, Food Processing Skills Canada



"At **Food Processing Skills Canada**, we rely on labour market information to guide development of our workforce resources so that they are responsive to the needs of the industry. It is our hope that industry stakeholders will do the same and use this analysis to underscore the value of their own initiatives."

— Jennefer Griffith
Executive Director, Food Processing Skills Canada

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Section 1

Introduction

Food Processing Skills Canada (FPSC), is pleased to present this report to the food and beverage processing industry, government decision makers and other stakeholders. This report stands as a resource for all. It details who the industry is, where it could go, and what's standing in its way. Producing this report in these challenging times has been a moving target. The world has changed and it's hard to know how history will look back on this time. A tectonic shift in every sector, and in everyday life, has occurred virtually simultaneously across the entire globe.

This report outlines what we observe to be the immediate economic and financial consequences of the COVID-19 global pandemic. However, according to our experts, the medium and longer-term impacts of COVID-19 on Canadian businesses cannot be fully estimated.





“ 91% of food and beverage processing businesses employ less than 100 people. ”

7 in 10 employers facing recruitment and retention challenges.

56,000 (The hiring requirement for the industry by 2025)

1 in 5 people employed in the food and beverage processing industry.

7,600 businesses located across the country.



“ A pessimist sees difficulty in every opportunity, an optimist sees opportunity in every difficulty. ”


— Winston Churchill

Canada's food and beverage processors are the link between farms and the sea and our tables. We transform Canada's agricultural and seafood commodities into a wide array of products for consumers or further processing. To put a finer point on it; almost every food or beverage product we consume is processed in some manner. This is a large, high value industry that touches every Canadian. It is also an industry at the crossroad to greatness.

This report is a call to action. The unprecedented upheaval brought on by the COVID-19 global pandemic will be remembered for a long time, of that there is no doubt. The question is will the food and beverage processing industry, and government decision makers, seize the opportunity this system-wide change presents. In the face of an uncertain future brought on by COVID-19, and pre-existing structural constraints on businesses, we must be optimists.

In 2017, there was an enthusiastic call from the Advisory Council on Economic Growth "to unleash the sector's full potential". The Agri-Food Table set even more ambitious growth targets calling for Canadian agricultural, agri-food and seafood exports to reach \$85 billion by 2025, a 32% increase from 2017 levels.

The recent international trade agreements - Comprehensive Economic and Trade Agreement, Comprehensive and Progressive Agreement for Trans-Pacific Partnership, Canadian-United States-Mexico Agreement - present obvious opportunity outside our borders, although there is significant opportunities for growth in Canada's domestic market as well. The Advisory Council noted Canada processes only half of its own agricultural output. Domestic market growth should be made easier by The Canadian Free Trade Agreement which was put into place in the summer of 2017, and focuses on eliminating barriers that restrict the movements of goods and services within Canada. These trade mechanisms clear a path to capture greater shares of domestic and international markets.



“ Canada will welcome more than 1.2 million newcomers between 2021 and 2023. ”

If the sector is to achieve these ambitious targets, it would place Canada in an enviable position of truly “feeding the world”. The domestic and international strategic advantage of doing so is obvious. Abroad, we would strengthen our place in the world, develop trade relations and participate with our allies in lifting other nations out of food poverty. At home, we would strengthen and build the industry by creating wealth and jobs, and Canada would grow by welcoming more newcomers. In fact, the Government of Canada announced late last year, that to make up for the shortfall in 2020 due to Covid-19, the country would welcome more than 1.2 million newcomers between 2021 and 2023, in addition to more than 400,000 new permanent residents every year from 2021 to 2023.

Still many ask, “is there really that much opportunity?”. The answer is, “never more so than now”. The global demand for food is expected to rise by 70 % between 2009 and 2050, fueled by a growing population and an expanding middle class that will consume considerably more protein than is the case today. Many of these middle class consumers will want to know their food has been produced in a safe and environmentally sustainable way and will favour products from countries such as Canada where environmental, labour, and food safety and quality standards are globally-recognized.

11 Sub-Sectors


Canadian Food & Beverage Manufacturing Sector

Labour market analysis shows that the Canadian food and beverage processing industry directly employs over 280,000 people and accounts for almost 1 in 5 of all manufacturing jobs. These jobs are with the industry's 7,600 businesses located across the country. It is important to note that there are an additional 4,000 or more, non-employer businesses that are defined as establishments with no employees or an indeterminate number of employees. These establishments do not maintain an employee payroll, but may have a workforce which consists of contracted workers, family members or business owners. They also include employers who have not had employees in the previous 12 months. The analysis shows that it isn't accurate to simply add both employment types together, which suggests closer to 12,000 businesses in the country, but it does provide an indicator of the type of businesses that comprise the industry.

Overall, the Canadian food and beverage processing industry is made up of 11 sub-sectors, with meat product processing being the largest. Ontario, Quebec, and BC are home to three-quarters of sector businesses. And, the sector is dominated by small and medium-sized businesses with 91% of businesses employing less than 100 people.

“**The Canadian food and beverage processing industry directly employs over 280,000 people.**”





As big as our sector is today, there is tremendous potential for it to become much bigger as the world's demand for food more than doubles by 2050 and consumers want new and innovative products.

So, what's standing in our way?

We have well-defined consumer demand and modeling shows it is increasing. We also have sufficient trade agreements, both domestically and internationally, to scale-up the sector as called for by the Agri-Food Table.

What is really standing in our way is an astonishing lack of people. In fact, there aren't enough people working in the sector today to even maintain the status quo.

To ensure that Canada is at the forefront of this rapidly growing sector at home and abroad, the industry must recruit tens of thousands of new workers between now and 2025, as well as equip them with an increasingly diverse range of skills and knowledge.


Consider the magnitude of the figures in the following two scenarios we modelled:

1. "The baseline scenario" is where export growth is tied to a United Nations forecast of world population growth.
2. "The growth scenario" is an alternative scenario where the Agri-Food Table's \$85 billion export target is met by 2025.

The hiring requirement for the industry over the 2020-2025 period in the "the baseline scenario" is estimated at about 35,000 (or 12% of the industry's workforce in 2020).

In "the growth scenario" the total hiring requirement rises to 56,000 workers equivalent to 20% of the industry's 2020 workforce and an additional 21,000 workers over the baseline forecast.

If those figures aren't startling enough, this report illustrates that we're starting from a critical labour shortage deficit today, and its coming at a great cost.

A man wearing a dark cap and a light-colored work shirt is shown in profile, looking towards the right. The background is a bright, hazy sunset or sunrise over a field with trees, creating a warm, golden glow. The man's hand is slightly raised as if pointing towards the horizon.

“ What is really standing in our way is an astonishing lack of people. In fact, there aren't enough people working in the sector today. ”

Impact of labour shortages

Average Number of Vacancies (from survey)



\$1.1K Average Daily Cost to Employer



7600
Number of Employers 2019

-\$8.5M
Average Daily Loss of Revenue

-\$3.1B
Average Yearly Loss of Revenue

Economic analysis estimates that a single unfilled position in the food and beverage processing industry could cost businesses as much as \$190 per day in lost net revenue. That may not seem like much, but when you aggregate it over the entire sector, losses from job vacancies could total up to an estimated \$8.5M in net revenue per day. If this is not addressed the \$8.5M per day becomes \$3.1B annually.

These figures underscore that this is not a human resource issue alone, it's actually the most critical business challenge for the industry. As this report reveals, labour availability is the top overall business challenge, ahead of coping with regulations, implementing technology and meeting customer preference.

7 in 10 employers report facing recruitment and retention challenges. Most of these employers describe the problem as persistent and on-going. The evidence also suggests that recruitment and retention problems have worsened over the past year.

How then can the industry "get its house in order" and address the most critical challenges employers face? Indeed, that is the purpose of this report. To outline the conditions that exist and deliver actionable recommendations for employers and governments.

This report shines a light on the challenges we face in recruiting, skills training and retaining qualified workers. It discusses the impact of integrating Industry 4.0 production processes and the effect it could have on reducing the hiring burden. We also explore the challenges we have to competitiveness in the industry.

We have included a detailed analysis of sector trends such as evolving consumer preferences, consolidating regulatory

frameworks, cannabis edibles and infused beverages, and climate change that employers and governments alike should appreciate. The report also explores perceptions of the industry and impact on preferences.

To give employers and other stakeholders a sense of the overall industry dynamic, this report profiles jobs, how individuals are paid, including comparisons with other manufacturing sectors, and unionization across the sectors.

We take a critical look inside food and beverage processor businesses – from business priorities to human resources. With labour constraints and the need for appropriately skilled people, this report also provides guidance to employers on data-driven best practices. Specifically, we look at human resource challenges, access to immigration programs, employer recruitment and retention strategies, methods of outreach and communications, and employee benefits and other incentives.

There is also a specific analysis of studies that assess five generations in the workplace and identify underrepresented groups in the industry who are most interested in employment. The analysis is rounded out with a comprehensive review on building a skills foundation to meet the needs of the sector.

This report calls on employers, industry associations, government, and educational and research institutions to be nimble and take heed of the valuable lessons we have learned so far in this global pandemic. The research also demonstrates that with a willingness to explore new opportunities and an enthusiasm to embrace change, we can successfully reach the next great chapter of our industry. An industry that feeds Canada and the world, and is at the crossroad to greatness.

Objective of this Report

FPSC conducted this labour market information study to deliver detailed industry data highlighting tensions and opportunities, as well as actionable recommendations, to employers, government decision makers and other stakeholders. This report presents the findings of robust research drawing on numerous credible methodologies, including information on industry trends, labour trends, demographics, and key results from several surveys. Information is provided for the sector as a whole, as well as for the 11 sub-sectors that comprise it.

This report comes at a time when the sector is facing a combination of unprecedented opportunities, and also challenges. In addition, it is fair to say that the salience of this report has increased in light of the COVID-19 global pandemic.

Organization of this Report

We designed this report to flow from the general to the specific, with the latter based on meaningful input of the many hundreds of industry employers and labour market participants.

The report begins with a profile of the Canadian food and beverage processing industry, including its contribution to the economy, sub-sectors, geographical distribution, opportunities for growth and barriers to growth. This is followed by an examination of key trends shaping the future of the sector, ranging from consumer preferences, climate change and the advent of Industry 4.0.

Then, we move to an analysis of major labour trends in the sector, including a projection of labour requirements to 2025 based on two different growth scenarios. Included here is a profile of the sector's labour force by key sociodemographic characteristics, such as age, gender, location, as well as a profile of major occupations.

The wide range of human resource issues faced by the sector are examined, as well as some of the key approaches that have been implemented by employers in response. Most of this information comes from three surveys, including one of employers and two of labour market participants. The third section assesses the impact that the COVID-19 pandemic has had on the industry. The end of the report is dedicated to conclusions and actionable recommendations.

| Method | Objective | Approach |
|--|---|---|
| <p>Review of Statistics Canada Reports</p> | <p>Profile the sector, sub-sectors, estimate current & potential future contribution to the economy, project growth in production and employment.</p> | <p>Examine the latest and most relevant Labour Market Statistics and Census data.</p> |
| <p>Review of other primary and secondary sources</p> | <p>Complement Statistics Canada data and to estimate potential labour demand and identify gaps. Identify key sector trends of most relevance to the labour market (e.g., Industry 4.0, cannabis edibles, climate change).</p> | <p>Examine the latest and most relevant government, private and NGO reports (e.g., OECD, Industry Canada, Agriculture and Agri-Food Canada, Advisory Council for Economic Growth, FPSC) Review findings from a survey of public perceptions of working in meat and fish and seafood processing. Review findings from a survey of public perceptions of working in meat and fish and seafood processing.</p> |
| <p>Identification of study programs relevant to the food processing industry</p> | <p>Profile the range of programs available and to help identify potential gaps (e.g., in light of employer needs).</p> | <p>Identification of approximately 500 programs and courses offered at Canadian post-secondary institutions, private career training organizations, industry associations, as well as secondary school vocational training in Quebec. Classification by province/territory and nine areas of study.</p> |
| <p>Survey of food and beverage processing companies</p> | <p>Identify labour market challenges and related issues (e.g., HR challenges, retention & recruitment strategies, impacts of COVID-19).</p> | <p>740 companies were surveyed using two methods: 269 respondents responded online between February and May 2020, and 471 respondents responded by telephone (an initial group in March 2020, followed by a second sample in April - May 2020).¹</p> |
| <p>Survey of food and beverage processing companies</p> | <p>Examine generational perspectives in the workplace (e.g., career-related goals and aspirations, expectations of employers and the workplace, internal communications, learning and training).</p> | <p>1,500 people 16 years of age and older were surveyed online between March 27th and April 3rd, 2020.²</p> |

Methodology

The information presented in this report was gathered from a wide variety of sources, including secondary and primary research. Each method was carefully selected to meet the study objectives. The methods complement each other so as to provide a 360-degree view of the industry across a range of key issues. Through the use of surveys and exhaustive reviews of labour market statistics and other data (e.g., relevant post-secondary education programs across Canada), the report goes into depth on several facets, including the industry's initial response to the COVID-19 pandemic.

Each source is described in the table on the left.

Section 2

The Canadian Food Processing Sector in Profile

The food and beverage processing industry with its more than 7,600 businesses directly employs over 280,000 people accounting for almost 1 in 5 of all manufacturing jobs in Canada. The COVID-19 global pandemic has also clearly shown the industry's great strategic importance.

The industry is made up of 11 sub-sectors, with Meat Product Processing being the largest and Cannabis Product Manufacturing being the newest. Ontario, Quebec, and BC are home to three-quarters of the industry's businesses.

The industry is dominated by small or medium-sized businesses, with fully 91% of businesses employing less than 100 people.





“ The industry is made up of 11 sub-sectors, with Meat Product Processing being the largest and Cannabis Product Manufacturing being the newest. ”

\$85 billion by 2025.

The growth target the Agri-Food Table has set for Canadian agricultural, agri-food and seafood exports to reach.

22% The increase in exports of Canadian processed food and beverage products between 2016 and 2020.

70% The percentage the global demand for food is expected to rise between 2009 and 2050.



Almost every food or beverage product we consume is processed in some manner.

The food and beverage processing sector is the link between farms, or the sea, and our tables, transforming Canada's agricultural and seafood commodities into a wide array of products for consumers or further processing.

Below, we describe the size and nature of the food and beverage processing sector and delineate its global competitiveness. We also highlight opportunities for domestic and international growth, as well as discuss the labour market implications of sector growth.

Overall, we see that the industry is a major contributor to the Canadian economy. It also has significant growth potential, especially when compared to other sectors of manufacturing. The ambitious targets set for the industry reflect its potential. We also note that the COVID-19 pandemic has illustrated the strategic importance of food and beverage processors, and of the food supply chain more broadly.

However, it is critical to note that optimal industry growth can only happen with the right conditions. The last part of this chapter highlights the actions proposed by the Agri-Food Table for strengthening the Canadian agri-food sector.

The role of trade agreements, including interprovincial trade, are also key to sector growth.

“ The food and beverage processing sector has significant growth potential, especially when compared to other sectors of manufacturing. ”

19.5% of all manufacturing jobs in Canada are in the food and beverage processing industry.

Size of the Sector and Our Contribution to the Canadian Economy

The food and beverage processing industry is a huge contributor to the Canadian economy³, consider the following facts⁴:

- 🍁 Food and beverage processors achieved \$117.8 billion in sales of manufactured goods in 2019.
- 🍁 The industry feeds Canada and the world with approximately 70 per cent of goods sold to Canadians through grocery stores and restaurants, and the remainder is exported to more than 190 countries⁵, making Canada the fifth-largest agricultural exporter in the world³ and the 11th-largest exporter of agri-food⁶.

- 🍁 The industry represents two per cent of Canada's gross domestic product (GDP).
- 🍁 Over 7,600 businesses across Canada, many in rural and remote areas, directly employ over 280,000 people.
- 🍁 A staggering 19.5 per cent of all manufacturing jobs are in the food and beverage processing industry, which makes it Canada's largest manufacturing sector.
- 🍁 The industry is efficient generating 2% of the Canadian GDP but accounting for only 1% of businesses in Canada.
- 🍁 Processor businesses boost other sectors by indirectly supporting hundreds of thousands of jobs in other industries (e.g., transportation, retail, hospitality).




Size matters, but as the COVID-19 global pandemic has revealed - the sector is also of great strategic importance⁷.



11 Sub-Sectors of Food and Beverage Processing

We define the food and beverage processing sector as those businesses engaged in Food Manufacturing (NAICS⁸ Code 311), Beverage Manufacturing (NAICS 3121) and Cannabis Product Manufacturing (NAICS 3123), which includes Cannabis edibles and infused beverages.

Food and beverage processing is the transformation of agricultural products into food or beverages, or of one form of food or beverage into other forms for consumption by humans or animals:

-  Primary processing includes basic cleaning, grading and packaging as in the case of fruits and vegetables.
-  Secondary processing includes alteration of the basic product to a stage just before the final preparation as in the case of milling paddy to rice.
-  Tertiary processing leads to a high value-added ready-to eat food like bakery products, instant foods, health drinks, etc.

The definition of what constitutes a "processed" food or beverage is wide and encompassing.

The sector is divided into 11 sub-sectors, each processing a wide variety of products:



Animal Food Manufacturing
(NAICS 3111)



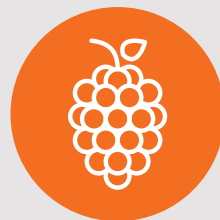
Sugar and Confectionery Product Manufacturing
(NAICS 3113)



Dairy Product Manufacturing
(NAICS 3115)



Grain and Oilseed Milling
(NAICS 3112)



Fruit and Vegetable Preserving and Specialty Food Manufacturing
(NAICS 3111)



Meat Product Manufacturing
(NAICS 3116)

In 2020, there were over 7,600 food and beverage processing businesses operating in the sector that employed at least one person, which adds up to a total workforce of more than 280,000. The vast majority of these establishments are small or medium-sized businesses⁹, with roughly 91 per cent of food and beverage processors in Canada having fewer than 100 paid employees¹⁰. Although food and beverage processing businesses are significant sources of employment in every province and territory, they are mostly concentrated in Ontario, Quebec and British Columbia. In these provinces, employers have

access to large pools of labour and are close to consumers and their products, both in Canada and the United States (the sector’s largest export market).¹¹

Meat Product Manufacturing was the sub-sector with the largest workforce in 2020, employing 65,113 people, followed by Bakeries and Tortilla Manufacturing (46,691), Beverage Manufacturing (42,094) and Other Food Manufacturing (35,543). Cannabis Product Manufacturing had the smallest workforce (2,700), while Grain and Oilseed Milling employed 8,722 people.¹²



Seafood Product Preparation and Packaging
(NAICS 3117)



Other Food Manufacturing
(NAICS 3119)



Cannabis Product Manufacturing
(NAICS 3123)



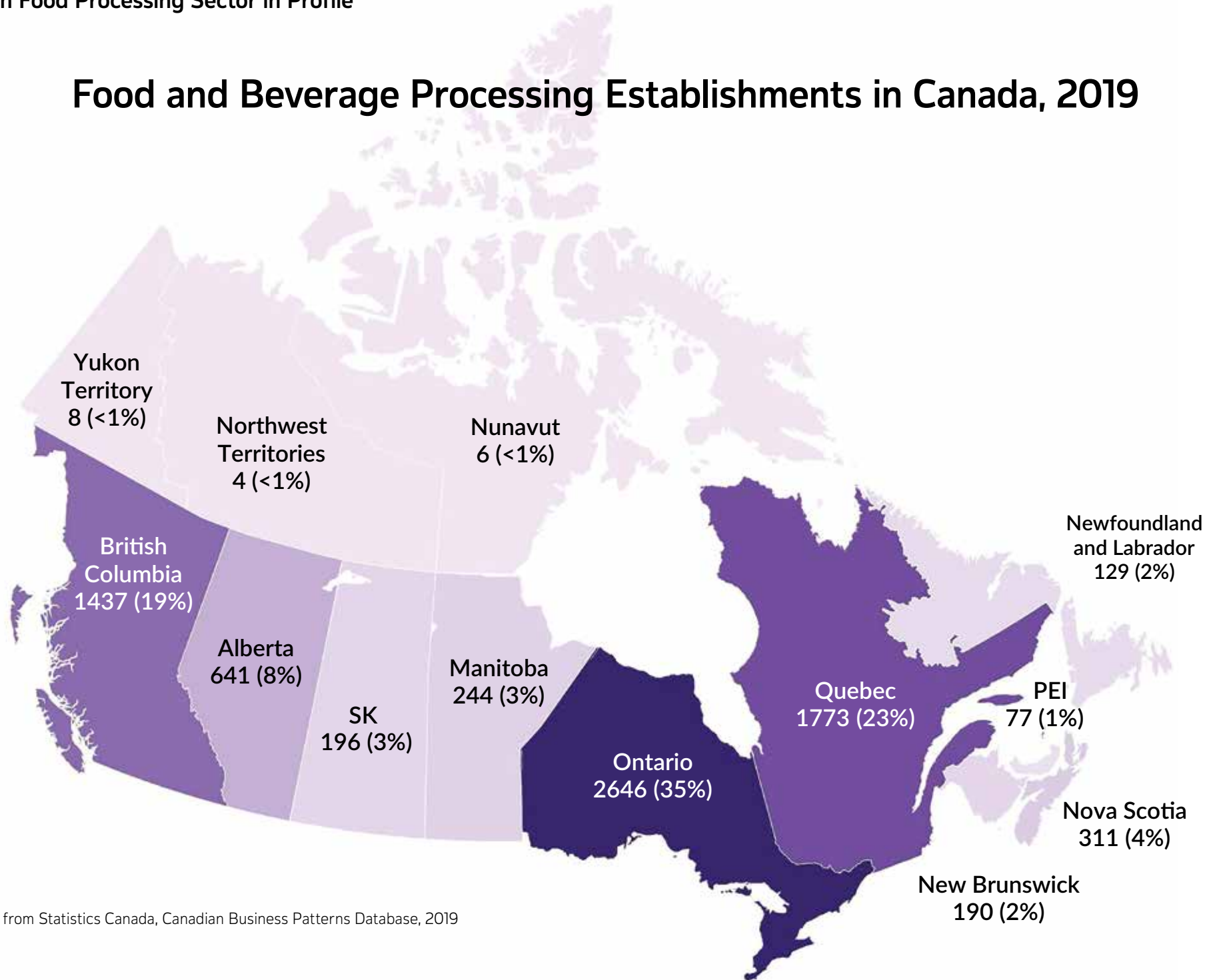
Bakeries and Tortilla Manufacturing
(NAICS 3118)



Beverage Manufacturing
(NAICS 3121)

Meat Product Manufacturing was the sub-sector with the largest workforce in 2020, employing 65,113 people.

Food and Beverage Processing Establishments in Canada, 2019



Source: Industry Canada, from Statistics Canada, Canadian Business Patterns Database, 2019



Other Food Manufacturing

Other Food Manufacturing (NAICS 3119) is an outlier within the food and beverage processing spectrum. This sub-sector represents over 40% of all the industry's indeterminate businesses and covers the widest range of products of any sub-sector, it resembles the kitchen drawer with all of the odds and ends. This is further complicated by the fact many of the processors also manufacture products in one of the other 10 food and beverage processing sub-sectors. This presents a challenge in understanding and accurately partitioning units of analyses such as facilities or employees according to sub-sectors given the potential overlapping sub-sectors as currently defined within the

other foods category. Understanding the structure of the Other Food Manufacturing sub-sector in detail will contribute to improved outcomes and labour market information for the industry. It will limit the risk associated with the potential overlap such as double counting and understanding skills and HR requirements in having employees work across multiple sub-sectors.

Within Other Food Manufacturing there is a catch all subcategory called All Other Food Manufacturing, which is where the majority of new products get placed. As such, it is difficult to get an idea of the real drivers of growth within the sector as there is no effective way to separate out economic and labour information. There are five subcategories within Other Food Manufacturing.

“ Other Food Manufacturing resembles the kitchen drawer with all of the odds and ends, since it covers the widest range of products of any sub-sector. ”

Snack Food Manufacturing (NAICS 31191)

Overview: This subcategory comprises establishments primarily engaged in salting, roasting, drying, cooking or canning nuts; processing grains or seeds into snacks; manufacturing peanut/nut butter; or, manufacturing potato chips, corn chips, popped popcorn, hard pretzels, pork rinds and similar snacks.

Major Products:

- ☞ Potato chips
- ☞ Tortilla and corn chips
- ☞ Peanut butter
- ☞ Nuts and seeds
- ☞ Other snacks

Coffee and Tea Manufacturing (NAICS 31192)

Overview: This subcategory comprises establishments primarily engaged in roasting coffee; manufacturing coffee and tea extracts and concentrates, including instant and freeze dried; blending tea; or, manufacturing herbal tea. Establishments primarily engaged in manufacturing coffee and tea substitutes are included.

Major Products:

- ☞ Espresso beverages
- ☞ Instant coffee
- ☞ Ready-to-drink
- ☞ Single-cup coffee
- ☞ Tea
- ☞ Whole bean roasted and ground coffee (drip coffee)

Flavouring Syrup and Concentrate Manufacturing (NAICS 31193)

Overview: This subcategory comprises establishments primarily engaged in manufacturing soft drink concentrates and syrup, and related products for soda fountain use or for making soft drinks.

Major Products:

- ☞ Fountain soft drink beverage bases
- ☞ Flavouring syrups for desserts and home beverage use
- ☞ Flavouring syrups made from fruit
- ☞ Liquid beverage bases
- ☞ Other flavouring agents

Seasoning and Dressing Manufacturing (NAICS 31194)

Overview: This subcategory comprises establishments primarily engaged in manufacturing dressings and seasonings.

Major Products:

- ☞ Dry mix food preparations
- ☞ Flavouring extracts
- ☞ Mayonnaise, salad dressings and sandwich spreads
- ☞ Prepared sauces, excluding tomato
- ☞ Salt, pepper and other spices



All Other Food Manufacturing (NAICS 31199)

Overview: This subcategory manufactures perishable prepared foods such as sandwiches, prepared meals and peeled or cut vegetables. Companies in the industry also use dried and dehydrated ingredients to manufacture dessert mixes, flavouring powders and processed eggs.

Main activities include:

- ☞ Manufacturing perishable prepared foods sold in bulk or packages, not frozen or canned
- ☞ Manufacturing dessert mixes
- ☞ Manufacturing sweetening syrup and molasses
- ☞ Manufacturing baking powder and yeast
- ☞ Manufacturing liquid, dried and frozen eggs
- ☞ Manufacturing flavouring powders, tablets and paste, including dry mix cocktail
- ☞ Manufacturing macaroni and pasta products that are packaged with other ingredients, not frozen or canned
- ☞ Manufacturing dried and dehydrated products, except pasta, packaged with other ingredients

Major Products:

- ☞ Perishable prepared foods sold in bulk or packages
- ☞ Whole, liquid, dried and frozen eggs
- ☞ Flavouring powders, tablets and pastes, including dry-mix cocktails

In 2018, All Other Food Manufacturing accounted for over 50% of the Other Food Manufacturing workforce, 65% of employers and nearly 70% of indeterminate businesses. This makes it incredibly difficult to determine where the growth in the sector is actually coming from.

Given this sub-sector's size, diversity, and growth indicators, it is likely that many of the main drivers of the overall industry are linked to the issues and characteristics of this sub-sector. As a result, it is crucial to form a comprehensive understanding of the Other Food Manufacturing sub-sector to develop valid and reliable knowledge and predictions for the industry.

“ In 2018, All Other Food Manufacturing accounted for over **50%** of the Other Food Manufacturing workforce, **65%** of employers and nearly **70%** of indeterminate businesses. ”



Our Domestic and Export Growth Potential

As big as the industry is today, there is tremendous potential for it to become much bigger as the world demand for food more than doubles by 2050 and consumers demand new and innovative products.

To ensure that Canada is at the forefront of this rapidly growing sector at home and abroad, Canadian food and beverage processors must be able to recruit tens of thousands of new workers between now and 2025, as well as equip them with an increasingly diverse range of skills and knowledge.



Exports of Canadian food and beverage processed products increased by over **22%** between 2016 and 2020 and recent trade agreements are expected to expand access to several key markets.

Sector Potential: Ambitious Targets

In 2017, the Advisory Council on Economic Growth¹³ identified Canada's agriculture and food sector as one of eight sectors with untapped potential and significant global growth prospects. The Council noted that, although the sector accounts for an impressive share of Canada's GDP and is a major exporter of agricultural and agri-food products, Canada still ranks behind countries such as the Netherlands and Brazil. The Council challenged the government and industry to work together "to unleash the sector's full potential,"¹⁴ and set an ambitious target of increasing Canada's agricultural and agri-food exports by US\$30 billion over the next five to 10 years. The Council proposed that value-added

agri-food exports should account for the bulk of these gains, doubling Canada's share of world agri-food exports (to 5.6 per cent), with agricultural exports increasing to eight per cent of the global total (from the current 5.7 per cent).¹⁵

This call was echoed by the Report of Canada's Economic Strategy Tables: Agri-Food,¹⁶ (referred to in this report as "Agri-Food Table") which identified huge opportunities for Canada to build on its global reputation as a supplier of safe and high-quality products, and in particular, to supply the growing demand around the world for protein.¹⁷ The Agri-Food Table set even more ambitious growth targets than those from the Advisory Council or the federal government,¹⁸ calling for Canadian agricultural, agri-food and seafood exports to reach \$85 billion by 2025, a 32 per cent increase from 2017 levels.¹⁹





Challenges to Our Competitiveness

Since 2002, the food and beverage processing industry has vastly outperformed Canadian manufacturing overall.

Exports of Canadian processed food and beverage products increased by over 22% between 2016 and 2020, and recent trade agreements are expected to expand access to several key markets.

Other Food Manufacturing enjoys the most growth of overall share of the industry's GDP.

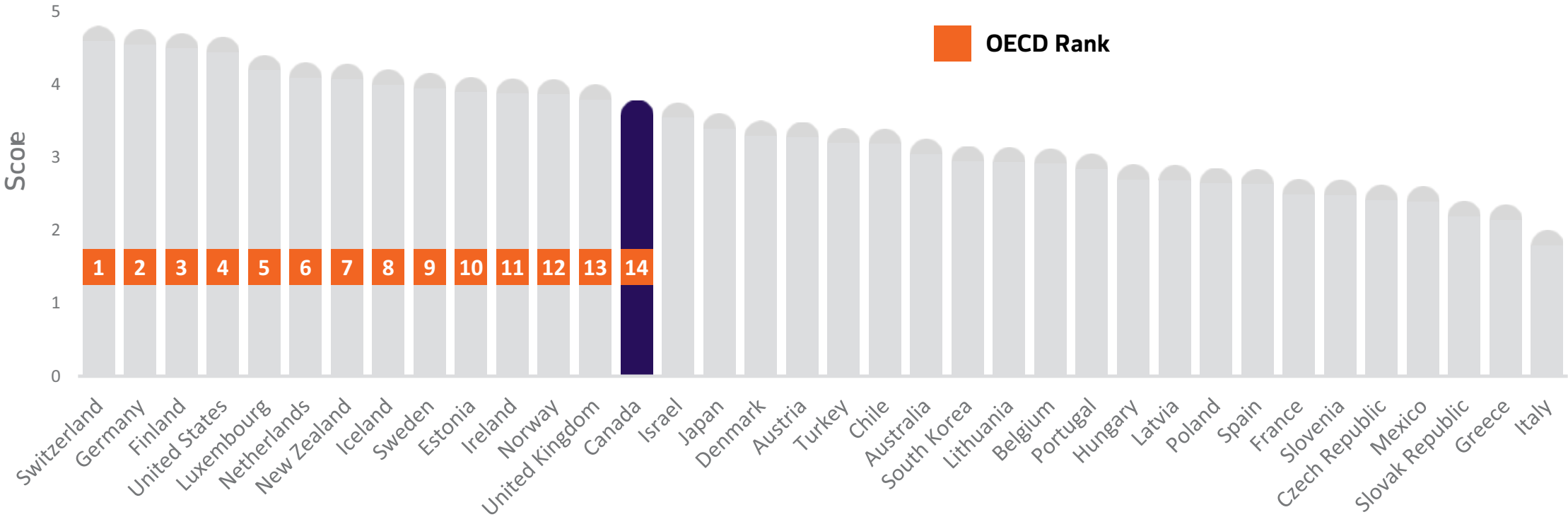
However, there are a number of challenges to industry competitiveness.

Over the past decade, the Canadian manufacturing industry has faced several challenges that have impacted its competitive position, such as fluctuation in the Canadian dollar, slow labour productivity, aging infrastructure and a significant increase in commodity prices.

An added difficulty for food and beverage processing businesses is that most of them are small and medium-sized businesses with fewer than 100 employees.

Typically, research and development (R&D) is carried out by large firms with more than 500 employees. Considering that only 1 per cent of processing establishments in Canada have more than 500 employees, it is likely that a relatively small portion of the industry's effort and workforce is dedicated to R&D activities.

Global Competitiveness Index for OECD Countries, 2017



Source: Report of Canada's Economic Strategy Tables: Agri-Food, Innovation, Science and Economic Development Canada

Competition for scarce labour pools has also been a major challenge for the food and beverage processing sector and its global competitiveness. While the Canadian public may be under the impression that the sector is home to many temporary foreign workers, the fact is that Canada's competitors use much more foreign labour.

Despite these challenges, the food and beverage processing industry has continued to prosper in times of slow overall economic growth. For example, the industry's GDP was nearly 23% higher in 2016 compared to 2004. Conversely, the manufacturing industry in general has been unable to return to pre-recession levels (with GDP remaining 10% lower than its 2004 level).

In terms of proportion of GDP growth at the sub-sector level, analysis reveals that Other Food Manufacturing (including snack foods and coffee and tea) achieved the most growth at 13.0%, followed by Grain and Oilseed Milling (9.9%) and Fruit/Vegetable Manufacturing (6.8%). Sugar and Confectionery Product Manufacturing (-7.7%) was the only sub-sector to see its proportion of GDP decline, while Dairy Products and Baked Goods remained flat.

Photo courtesy of Ocean Choice International



“ Other Food Manufacturing including snack foods and coffee and tea achieved the most GDP growth at 13.0%, followed by Grain and Oilseed Milling at 9.9%. ”

Path to an Expanded and More Competitive Sector

In Budget 2017, the Government of Canada announced a new vision for Canada's economy as a global leader. The Government created six economic strategy tables aimed at increasing the innovation of several sectors, including the agri-food sector. The report produced by the Agri-Food Table proposed action in the following five key areas to strengthen the Canadian agri-food sector.²⁰

1 An agile regulatory system that promotes the competitiveness of the agri-food sector and moves at the speed of commerce: Canada's regulatory system provides globally renowned quality and safety assurance thereby making it a key "Canada Brand" attribute. At the same time, this system is increasingly inhibiting industry's nimbleness by restricting innovative practices and products. It is slow-footed and lacks coordination across federal departments and levels of government. As a remedy, the Table called for "fundamentally transform[ing] regulatory processes to bolster Canada's agri-food competitiveness by reforming regulators' mandates to include innovation, growth and overall sector competitiveness" as a core consideration.

2 Build a state-of-the-art transportation and IT infrastructure network: A well-functioning trade-related transportation system is critical to Canada's reputation as a reliable supplier of high-quality products at home and abroad. Several infrastructure gaps exist, however. Canada's rural areas, for example, are disproportionately affected by a lack of access to reliable broadband service. Included among the Table's recommendations was for Canada to "embrace digitally-enabled infrastructure systems, and coordinate infrastructure and supply chain performance data through a new National Transportation and Logistics Platform."

3 Develop and diversify Canada's agri-food markets: Maintaining and expanding competitiveness in domestic and international markets is essential to sector growth. The Table argued for the creation of "clear and well-informed strategies for where to play and how to win in key geographic and product markets..." Among its recommendations was a call for Canada to "bolster an open and rules-based approach to trade by demonstrating strong international leadership." The Table also called for the removal of interprovincial trade barriers.

4 Invest in innovation and boost competitiveness through increased automation and digitization: In order to reach growth targets set by the Table, Canada needs to increase investment and technology adoption. Later in this report we discuss how the Canadian agri-food sector lags behind the U.S. and other competitors in R&D investment. Among the Table's recommendations was accelerated capital cost allowance for machinery, equipment and digital automation tools, and the creation of a Canada Agri-Food Innovation Centre.

5 Foster a diverse labour force with the right set of skills to help the sector achieve its maximum potential: Noting the shortage of labour that exists at all levels within the sector, from engineering to basic production, the Table saw an opportunity to increase participation of underrepresented groups including young people, women and Indigenous Peoples. Chief among its recommendation was for the Government of Canada to create a "skills and talent collaboration hub empowered to develop a skills and talent roadmap for the future involving the participation of existing bodies and in partnership with educational institutions, industry and labour groups."

There are, and will continue to be, many opportunities for Canadian food and beverage processors to capture a significant share of expanding international markets.

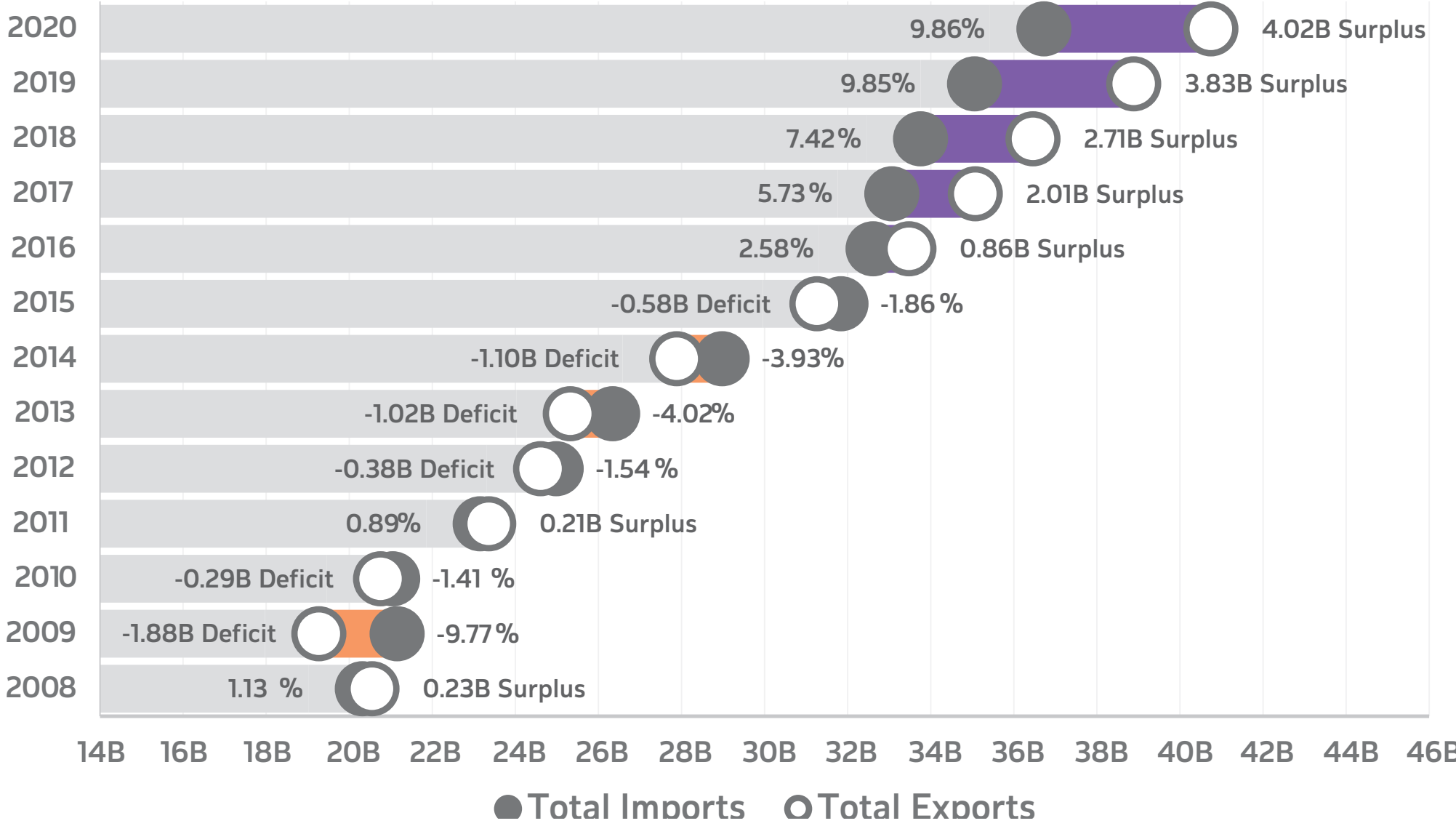
The global demand for food is expected to rise by 70 per cent between 2009 and 2050,²¹ fueled by a growing population and an expanding middle class that will consume considerably more protein than is the case today. Many of these middle-class consumers will want to know their food has been produced in a safe and environmentally sustainable way and are likely to favour agricultural products from countries such as Canada where environmental, labour and food safety and quality standards are considered to be world-leading.²²

Canada's processed food and beverage products are already exported to more than 190 countries, although the majority of these exports are concentrated in six major markets: the United States, China, Japan, Mexico, Russia and South Korea. The United States is Canada's top export market, accounting for more than 70 per cent of total food and beverage exports, while Canada remains the largest export market for U.S. agricultural products.

Exports of Canadian processed food and beverage products increased by 22% between 2016 and 2020, while imports grew by about half that rate (13%). As a result, Canada moved from a trade deficit in processed food and beverage products in 2012-2015 to a trade surplus from 2016 onwards. The industry had an overall trade surplus of \$4 billion in 2020.²³

The majority of the industry's exports are concentrated in 6 major markets: the United States, China, Japan, Mexico, Russia and South Korea.

Canada's Trade in Processed Food and Beverage Products, 2008-2020



Source: Industry Canada, Trade Data Online



Recent international trade agreements, such as the Canada-European Union Comprehensive Trade Agreement (CETA)²⁴, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)²⁵ and the Canada-United States-Mexico Agreement (CUSMA)²⁶ are increasing access for Canadian exporters in three of the largest trading regions in the world. This puts Canada in a strong position to capture a significant share of the growing global demand for food and beverage products.

Furthermore, as of the beginning of 2017, a customs tariff order repealed or amended approximately 200 different tariffs on imported food ingredients used in the agri-food processing industry, including certain fruits and vegetables, cereals and grains, spices, fats and oils, food preparations, and chocolate products. Reducing tariffs on manufacturing inputs helps lower production costs for Canadian businesses to enhance their overall competitiveness, both domestically and abroad.

“ Reducing tariffs on manufacturing inputs helps lower production costs for Canadian businesses. ”



“ Breaking down barriers interprovincially will also further enable companies to reach international markets. ”

Domestic Opportunities

Both the Advisory Council and the Agri-Food Table clearly identified significant opportunities for growth in Canada's domestic market as well, with the Council noting that Canada processes only half of its own agricultural output.²⁷ The Agri-Food Table cited the rising share of imports in the growing Canadian processed food market – up from 22 per cent in 2007 to nearly 30 per cent in just 10 years – as a lost opportunity for Canada's food processing sector²⁸ and recommended a 27 per cent increase in the domestic sale of Canadian agricultural and food processing products by 2025, rising to \$140 billion from \$110 billion in 2017.²⁹

Domestic market growth should be made easier by the Canadian Free Trade Agreement (CFTA), which was put into place in the summer of 2017. It focused on eliminating barriers that restrict the movements of goods and services within Canada, providing the opportunity to capture a greater share of the domestic market. Breaking down barriers interprovincially will also further enable companies to reach international markets, by increasing their production domestically (i.e., attaining a critical mass of production volume for exporting to become financially viable).

3 Section

COVID-19 Impacts

To May 2020, and with few exceptions, the research suggests that the impacts of COVID-19 on the Canadian food and beverage processing industry have been **very negative**,³⁰ to the point that close to half of surveyed companies (43%) were feeling under threat. The situation appears to be most dire in Quebec and relatively less severe in the Meat Product Processing sub-sector.

A startling 59% of surveyed businesses reported a decline in customer orders. In the face of such a shock and some abrupt shifts in consumer consumption habits, the industry has had to reconfigure workplaces to protect the health of employees, increase production in some areas and shift production in others.

More than seven-in-ten (71%) surveyed companies reported that they have taken at least some form of action in response to COVID-19. The most common responses were to reduce workers' hours (43%) or conduct layoffs (41%). However, a comparison of similar data for Canadian businesses as a whole suggests that the food and beverage processing sector has been better able to weather the initial stage of the pandemic, than most other sectors of the economy.





“

59% of surveyed businesses reported a decline in customer orders. In the face of such a shock and some abrupt shifts in consumer consumption habits, the industry has had to reconfigure workplaces to protect the health of employees, increase production in some areas and shift production in others.

”

43%

**OF COMPANIES
FEEL UNDER
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71%

**OF COMPANIES HAVE
TAKEN SOME FORM OF
ACTION IN RESPONSE
TO COVID-19**

43%

**REDUCED
WORKERS'
HOURS**

41%

**CONDUCTED
LAYOFFS**

The immediate economic and financial consequences of the COVID-19 global pandemic are starting to be understood. The medium and longer-term impacts of COVID-19 on Canadian businesses, however, cannot be estimated given the high levels of epidemiological and economic uncertainty that persists around the world. The Canadian food and beverage processing industry is a global industry with heavy reliance on both exports and imports. Until full implementation of an effective COVID-19 vaccine strategy is realized, deep uncertainty will remain. Even short-term predictions are challenging to make. To illustrate this, consider that in April and May 2020 more than one in four surveyed food and beverage food processors (26%) were unable to predict their production capacity for the upcoming month.

The results of a survey of Canadian food and beverage processors suggests that the initial impacts of COVID-19 on the sector have been very negative. The nature of these impacts, and of how companies have coped, are discussed following.



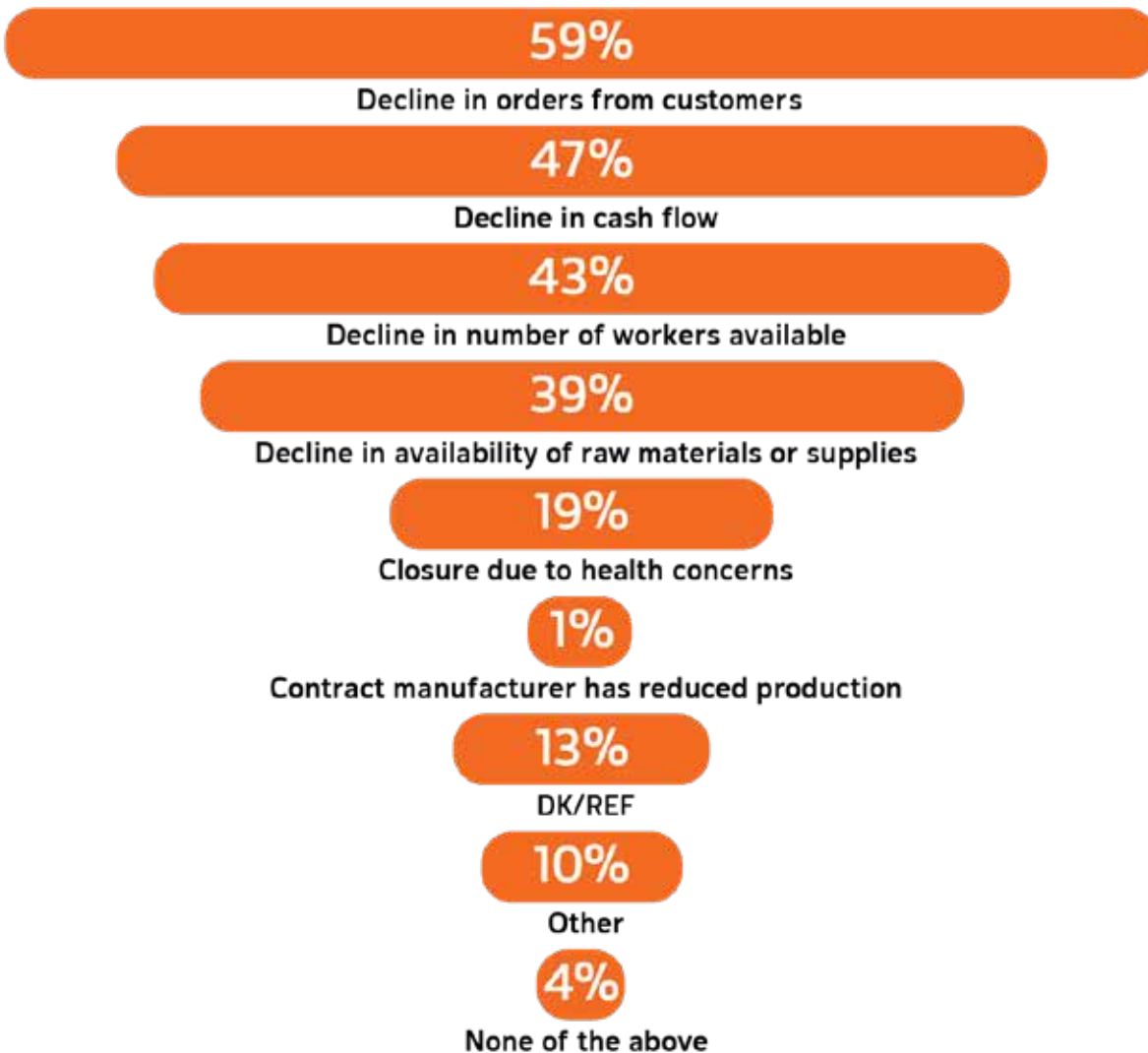
“ Until full implementation of an effective COVID-19 vaccine strategy is realized, deep uncertainty will remain. ”

Overview

Various chains of events have impacted the industry resulting in improvised responses and adaptations. Immediate, large shifts in consumer demand for food and beverage products have focused on grocery retailers and away from restaurants and hospitality outlets. This has required rapid adjustments: sudden changes in packaging (e.g., wholesale to retail types of packaging in dairy), types of products in demand at the retail level (e.g., yeast, flour), and "panic buying" of certain food items. At the same time, significant declines in customer orders have occurred in many sub-sectors as the restaurant, tourism and hospitality industries have largely shut down. In response, the industry has had to reconfigure workplaces to protect the health of employees, increase production in some areas and shift production in others.

It is also important to appreciate that the demands placed upon this industry are unique in many ways, particularly given that businesses are operating as an "essential service" to maintain the food supply chain for Canada and the world.

Following is an analysis of immediate and short-term impacts that COVID-19 is having on the industry. Because the pandemic can exert such deep and abrupt impacts from one day to the next, it is important to understand that the information and data we collected was during the period of April to June 2020, with the main source being a combined phone/online survey of 470 companies. Other sources included media reports, Statistics Canada data, and government and industry websites.



Initial Challenges

According to the survey, most employers in the sector have experienced a decline in customer orders (59%), while close to half (47%) reported a reduction in cash flow. Quebec had the largest number of companies report a decline in customer orders (70%), followed closely by Atlantic Canada (67%). In contrast, just 37% of companies in the Prairie provinces (Alberta, Saskatchewan, Manitoba) reported a similar decline. Consistent with production declines, more than 70% of companies across sugar and confectionery, seafood and beverage sub-sectors reported experiencing declines in customer orders. In addition, the beverage industry (41%) was twice as likely to report closures due to health concerns. Declines in cash flows were also reported by a majority of beverage manufacturers and seafood processors.

The survey also found that 43% of businesses reported a decline in the number of workers available, thus exacerbating what had already been a tight labour market.

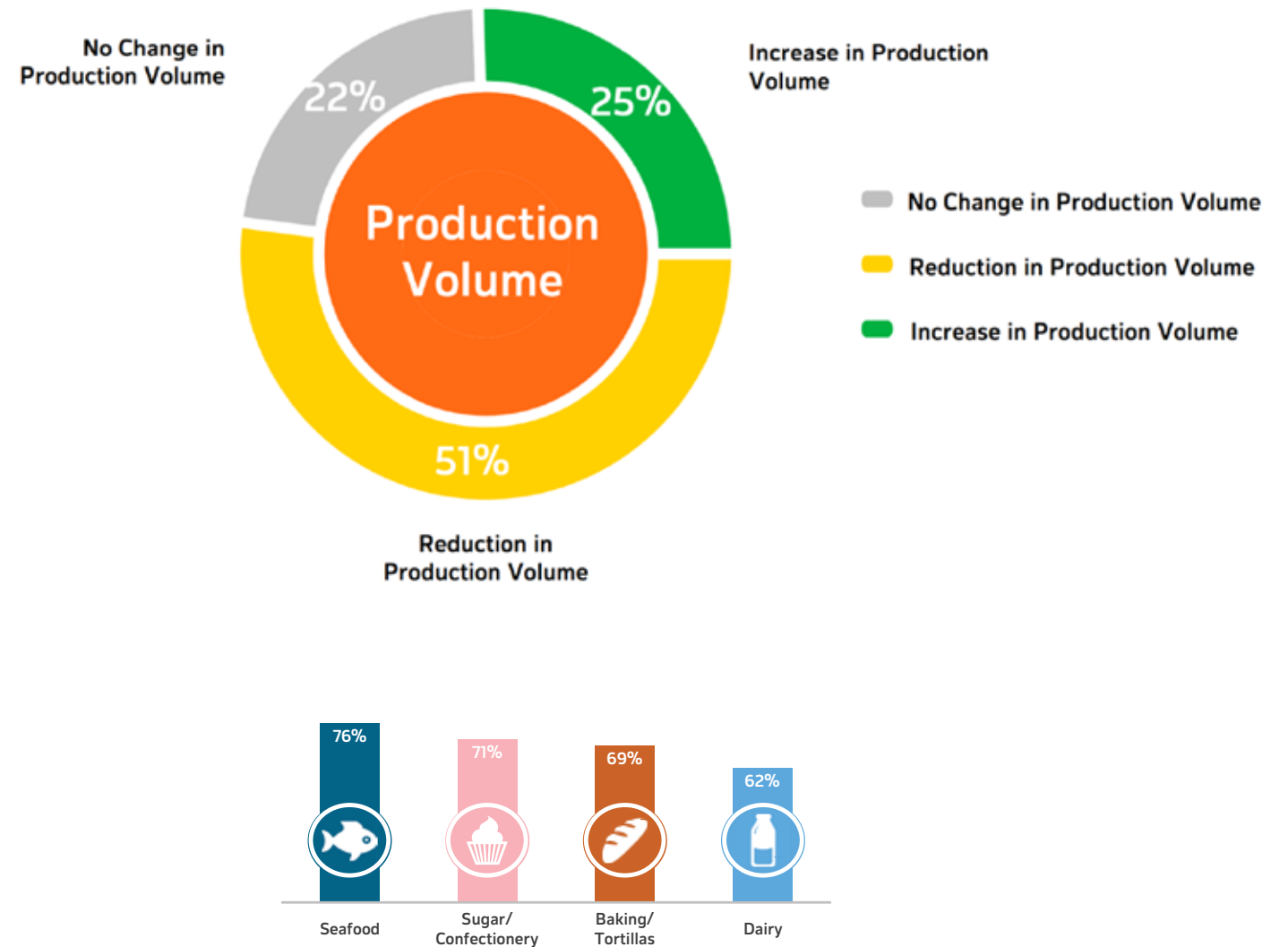


As we discussed earlier, both meat processing and Atlantic seafood processing rely considerably on temporary foreign workers to fill positions where there are shortages of Canadians with the proper skills and willingness to work in processing plants. While the meat processing sector tends to hire temporary foreign workers year-round, the Atlantic seafood processing sector is largely seasonal with many of the positions starting in April-May and running through until mid-autumn or later. As a result, the closure of international and provincial borders, requirements for quarantine, and challenges with international travel due to COVID-19 were occurring at the same time as many of the temporary seasonal foreign workers assisting with Atlantic seafood processing were planning to arrive in Canada.³³ It is not surprising then, that the survey found that Atlantic Canada experienced the most significant decline in the number of available workers, including 70% of companies in the seafood sector experiencing a decline in available workers.

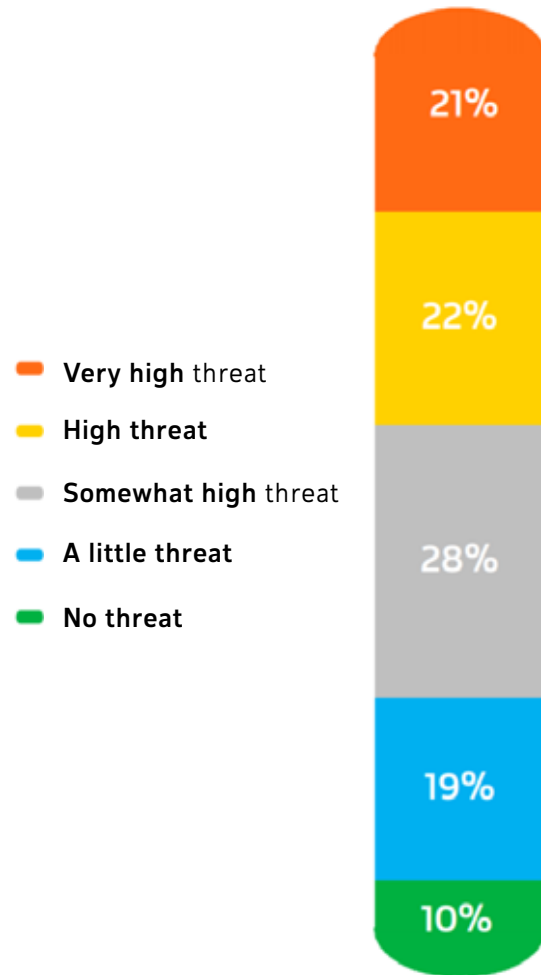
All of this impacted production inputs as well. The survey found that **39%** reported a decline in the availability of raw materials or supplies they need. In some cases, this may be packaging materials (e.g., flour mills needing smaller packages for grocery retail), but in other cases, it may be getting adequate first level processed product (e.g., ground beef, chicken breasts) for secondary levels of processing, or relying on various types of imported products (e.g., fruit not grown in Canada).

“ Atlantic Canada experienced the most significant decline in the number of available workers. ”

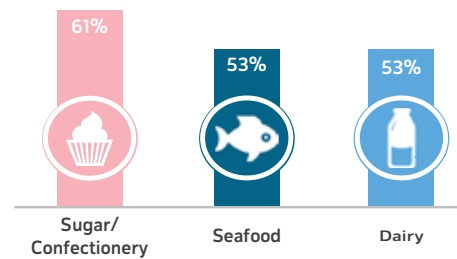
Given that close to 6 in 10 surveyed companies have experienced a decline in orders, it is not surprising to see that fully half of respondents (51%) reported that production volumes had declined, with the average declined estimated to have been a staggering 49% since the outbreak of the COVID-19 global pandemic. In contrast, only 25% of companies increased their production volume, notably in meat processing where 46% reported a production increase compared to only 36% that noted a decrease.



Seafood, sugar/confectionery, baking/tortillas, and dairy sectors had the highest proportions of businesses reporting reductions in production volume:



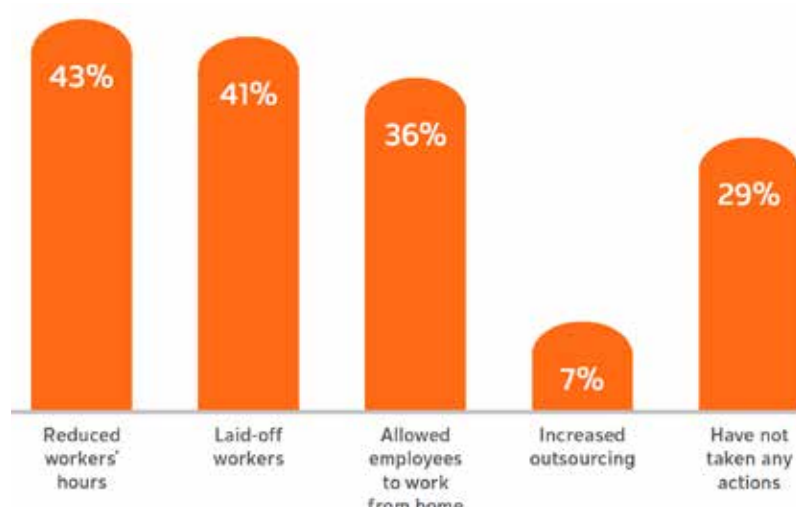
Companies who perceive the highest levels of threat are in sub-sectors that have already experienced significant declines in production volume:



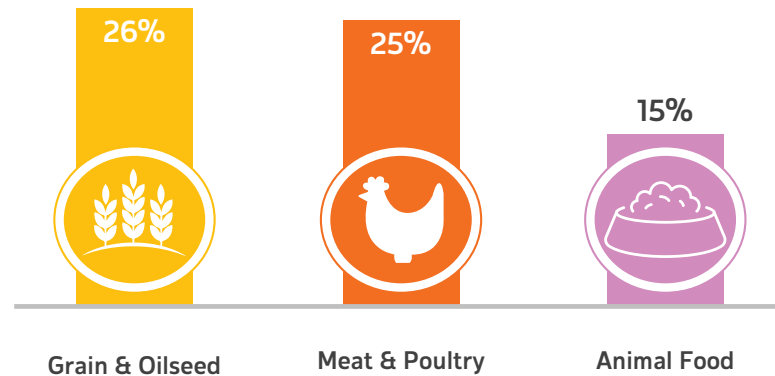
- Sugar/Confectionery: 61% report high levels of perceived threat
- Dairy: 53% report high levels of perceived threat
- Seafood: 53% report high levels of perceived threat

Regionally, companies in the Prairies were more likely to report an increase in production volume, partially attributable to the strong presence of the meat processing industry, and a lower incidence of COVID-19 at the time compared to Ontario and Quebec.

The broadest question in the survey pertained to the general threat posed by COVID-19. The vast majority of companies (90%) perceive at least some level of threat from COVID-19, including significant proportions perceiving the threat to their businesses as "high" or "very high."



Looking at a sub-sector analysis, nearly three-quarters of sugar and confectionery companies reported laying-off workers (73%), while 60% reported reducing workers' hours. Companies in the animal food (15%), meat (25%), and grain and oilseed milling (26%) sub-sectors were the least likely to report lay-offs.



More than seven-in-ten (71%) surveyed companies reported that they have taken at least some form of action in response to COVID-19. The most common responses were to reduce workers' hours (43%) or conduct layoffs (41%). Both of these actions, however, were taken somewhat less frequently than the average across all Canadian manufacturers (47% and 50% respectively) as reported in the Canadian Survey on Business Conditions. Similarly, a higher proportion of food and beverage processors reported not taking any action (29%) compared to 18% of Canadian manufacturers. Taken together, these results suggest that the industry has been better able to weather the initial stage of the pandemic than the broader manufacturing sector.

Learning to Adapt and Cooperate

In terms of other responses, many companies in the food and beverage processing industry have adapted to some significant shifts in consumer consumption patterns, in areas such as baking, fruit and vegetables, and particularly dairy. For example, demand for small 250ml cartons of milk, individual coffee creamers, and large 20-litre bags of milk for cafeteria/restaurant machines essentially disappeared within days, as restaurants, schools and workplaces closed. At the same time, demand for 1-litre and 2-litre milk cartons sold through grocery retailers increased significantly as consumers were buying more groceries and eating at home. Dairy production lines were nimble and switched packaging lines quickly in order to match demand changes.³⁴

“ Consumers are buying more groceries and eating at home. ”





Considerable levels of effort have been made in many sub-sectors to coordinate the rate of production of raw products (e.g., milk, seafood, vegetables) by farmers and harvesters. Employers were able to meet the slow down among various processors while adjustments to lines were made, products adapted, and productivity and plant closures addressed. For example, dairy processors worked with dairy farmers to lessen the volume of production of raw product. Farmers were able to reduce volumes by changing cows' diets while increasing cows' rest periods between calves.^{35, 35} Dairy manufacturers converted extra raw product into products with longer shelf-lives (e.g., cheese, butter, condensed milk) to avoid wastage, while also providing additional donations to foodbanks.^{36, 37}

In seafood processing, Atlantic seasons opened later for lobster and crab and some daily quotas were placed on harvesters to accommodate the challenges being faced by seafood processors who had to react to changes in consumer demand and acute labour shortages. Potato farmers reduced crop sizes to accommodate the backlog of raw product that existed with producers who experienced large drops in demand for french fries caused by bar and restaurant shutdowns.³⁸



Food and beverage processing companies will need to keep adapting quickly as the impacts of COVID-19 continue. All Canadian employers are adjusting work environments to protect employees' health and reduce the risks of transmitting COVID-19. This is challenging for many given adjustments in food and beverage processing plants often require innovation and significant investment. In addition to procuring appropriate personal protective equipment (PPE), production lines have been redesigned for

optimal productivity while considering human ergonomic and safety factors. The requirements of establishing physical distancing, constructing barriers, and adjusting ventilation systems can be challenging in an office environment. A dynamic, moving production line complicates these challenges even further.³⁹ It is important to note that processor businesses have shared best practices and exchanged ideas to quickly and successfully adapt.



Reflections and Current Situation

It has been over a year since the COVID-19 global pandemic was declared.

The situation has been difficult for all businesses with many layoffs and closures across the country. That said, the 2020 employment level for food and beverage processors was at 98% of the 2019 level. For comparison purposes, manufacturing without food and beverage processing was at 91% of its 2019 level and the Canadian economy as a whole at 92% of 2019 employment level. Food and beverage processing has outperformed manufacturing and the economy, in addition to this, wages have risen across the food sector (NAICS 311) by \$2.65/hour from 2019.

Being designated as essential workers and providing stable employment in a turbulent time has helped the industry retain people, however there will be a new challenge on the horizon as the rest of the economy opens back up. Increased competition for workers from other sectors that were hit harder by the pandemic, is to be expected.

The industry will also need to continue to build on its successes and highlight the important role it plays in the economy and the lives of all Canadians.



“ Food and beverage processing has outperformed manufacturing and the economy, in addition to this, wages have risen across the food sector by \$2.65/hour from 2019. ”



Section 4

5 Key Sector Trends

Five key trends are expected to impact the future of food and beverage processing in Canada:

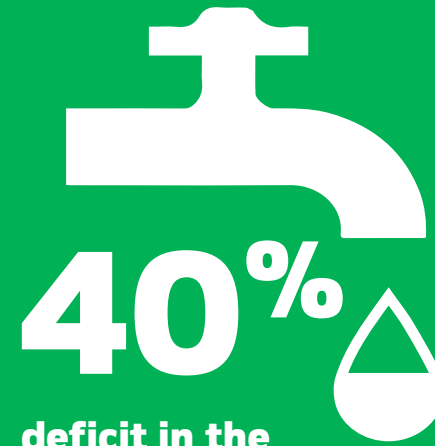
- 1** Consumer desire to make healthier and more ethical food and beverage choices.
- 2** Regulatory trends that tend to mirror evolving consumer preferences.
- 3** Industry 4.0 - e-commerce, technological innovation and the rise of "smart manufacturing".
- 4** Legalization of cannabis edibles and infused beverages and continued societal acceptance of cannabis as mainstream.
- 5** Challenges (and some opportunities) presented by global warming.

COVID-19 is also expected to have a lasting impact on the sector. This issue is discussed in Section 3 – COVID-19 Impacts.





“ In the realm of consumer tastes, the dominant trends are healthy eating and drinking, and rapid growth in demand for specialty products. ”



deficit in the available supply of water is expected by 2030



11-14%

more undegraded arable land will be needed to meet crop demands

8.5B



people by 2030. (The needs of a global consumer base is expected to surpass this.)

“Climate change can be viewed as a double-edged sword, replete with challenges but also providing significant opportunities.”



The success of food and beverage processors is affected by many variables, including consumer preferences, Canadian and international regulatory regimes, trade agreements, changes in technology and climate change.

Several major trends are expected to shape the future of manufacturing, and of food and beverage processing in particular:

- 🍁 In the realm of consumer tastes, the dominant trends are healthy eating and drinking, and rapid growth in demand for specialty products (e.g., Halal), with the latter reflecting the evolving nature of Canada's demographic composition.
- 🍁 Canadian regulations have instilled consumer confidence at home and abroad by responding to an increasingly complex regulatory framework which has hurt aspects of competitiveness.
- 🍁 Climate change can be viewed as a double-edged sword, replete with challenges but also providing significant opportunities (e.g., brand enhancement for companies that respond effectively and credibly to the crisis).
- 🍁 In the area of technology and innovation, Canada lags behind some competitors, notably the United States. Below, we discuss the significance of six key technological trends, including the advent of Industry 4.0.
- 🍁 The legalization of cannabis edibles and infused beverages provides a lot of opportunity to the industry. Demand is expected to be high and many food and beverage processors are in a position to capitalize on this.



1 Evolving Consumer Preferences

Consumers in Canada, like those in many countries, are increasingly choosing food and beverage products that are healthier and produced in a more sustainable way, creating a demand for new and innovative products and the reformulation of existing ones. This includes an overall trend to add healthy fats in foods and reduced use of sugar and simple carbohydrates. There is also a move toward low-sodium foods and those that address special dietary requirements, such as gluten-free, vegetarian and vegan products. Consumers are also interested in high-protein

and alternative-protein products, new or uncommon flavours, and artisanal and organic products.

Younger Canadians, Generation Z and Millennials, are more likely than previous generations to choose their food based on dietary sensitivities and personal values, such as ethically sourced food products, vegetarian and vegan preferences, and sustainable production methods. They are also more likely to substitute plant-based alternatives for meat and meat products, and to consume products that are organic, contain "clean" ingredients, are gluten-free, dairy-free and locally grown. These shifts are having a significant impact on the food and beverage processing industry, in particular, grain and oilseed milling, and dairy and meat sub-sectors.

“ Younger Canadians, Generation Z and Millennials, are more likely than previous generations to choose their food based on dietary sensitivities and personal values, such as ethically sourced food products, vegetarian and vegan preferences, and sustainable production methods. ”



“ Other consumer trends affecting Canadian food and beverage processors include the growing demand for convenience foods, meal kits and quick, ready-to-cook options, as well as smaller portions and package sizes that meet the needs of smaller families and individuals. ”

Changing demographics have boosted demand for specialty products, including Halal items and other foods and beverages that cater to an increasingly diverse ethnic population. Ethnic food markets, which generated an estimated \$49 billion in spending in 2015, have been projected to increase to \$97 billion in 2020. The Canadian food and beverage processing industry must adapt to this changing dynamic, not only to capture more of the domestic market but also to increase its share of global opportunities.

Other consumer trends affecting Canadian food and beverage processors include the growing demand for convenience foods, meal kits and quick, ready-to-cook options, as well as smaller portions and package sizes that

meet the needs of smaller families and individuals.

Taken together, these consumer trends suggest that the sector will need to become more diversified and specialized. Whereas before, a company might have produced three or four products to meet a fairly homogenized consumer market, today and tomorrow, a significantly expanded line of products may be required. The Canadian alcoholic beverage market is a good example of this.⁴⁰

The *Safe Food for Canadians Act* combined 14 previous regulations into a single framework to reduce inconsistencies and administrative costs and increase innovation opportunities for businesses.

2 Consolidating Regulatory Frameworks

Several regulatory bodies oversee and enforce food and beverage production and safety in Canada at the federal level, including the Canadian Food Inspection Agency, Health Canada and Measurement Canada. There are also several agencies, laws and regulations relevant to the food and beverage processing industry in each of the provinces and territories.

In January 2019, an updated regulatory framework took effect in Canada under the *Safe Food for Canadians Act* and the *Safe Food for Canadians Regulations*. The new framework combined 14 previous regulations into a single framework to reduce inconsistencies and administrative costs and increase innovation opportunities for business.

Additional regulatory measures, including Canada's Healthy Eating Strategy,⁴¹ are giving consumers even more ways to make informed decisions about the foods and beverages they purchase. As part of the Strategy, food labelling regulations were updated in 2016 revising the requirements for nutrition facts tables and lists of ingredients to make it easier for consumers to compare similar products and make healthier choices. The federal government has also proposed introducing mandatory front-of-package labelling for foods that are high in saturated fat and/or sugars and/or sodium.

While this is likely good news for consumers, these changes present challenges to processors. Added costs incurred to comply with new measures limit the funds available to invest in new product development that will meet changing consumer preferences.



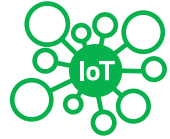
3 Industry 4.0: Technology and Innovation

Innovation is a key component in keeping operations running smoothly and efficiently in the food and beverage processing industry. Several emerging technologies are increasing the productivity and quality of food and beverage processors. See the following six examples of technological trends expected to impact the industry in the coming years:

Source: Looking Forward to 2019: Leveraging Technology to Align with your Business Strategies (Mike Edgett, 2018)

Technological Trend

Benefit



Adoption of the Internet of Things (IoT) and Sensors

This technology allows companies to monitor equipment performance, permit earlier detection of malfunction that could result in contamination, and take proactive steps to maintain equipment.



Cloud deployment of nearly all business systems

This technology allows for elastic storage of data, which is necessary when using IoT and sensors. It is particularly useful for companies with an acquisition or merger strategy.



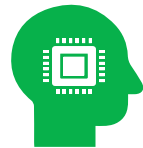
Revisiting supply chain tools to be more responsive to market changes

The increased complexity of the industry requires the adoption of planning tools that can be utilized across several industry-specific variables.



Embracing Product Lifecycle Management

Companies need to invest in R&D to develop new products that will meet the demand of consumers. A Product Lifecycle Management solution will be instrumental in managing the life cycle of a product and increasing speed to the market.



Artificial Intelligence (AI) improvements to responsiveness

Data science, algorithms and machine learning can anticipate likely outcomes so the company can better predict demand, reducing the amount of waste, forecast weather impact on crops and have more efficient resource planning.



The growth of e-commerce

Before COVID-19, companies were already making large investments in online purchase technology and logistics. A report by FMI and Nielsen (2018) found that by 2024, 70% of consumers will be grocery shopping online. The adoption and expansion of e-commerce has only accelerated during COVID-19. Adopting flexible packaging and incorporating reduced material costs and sustainability while still maintaining product freshness will be key to success for online retailers, including processors who sell direct to consumers.

All the trends described above are part of what some have dubbed “the fourth industrial revolution”, known commonly as Industry 4.0.

Industry 4.0 is the next stage in the evolution of production systems. Its impact will be felt across all sectors of Canada's economy. In food and beverage processing, Industry 4.0 will lead to the creation of “smart factories”, which differ from traditional factories in two ways. First, smart factories will enable machines, devices, sensors, and workers to connect to and communicate with each other. Second, smart factories will link real world environments with precise digital counterparts to create cyber-physical systems.

Industry 4.0 will allow for an integrated supply chain that will enable businesses to anticipate and respond to consumer needs, reduce the time required for research and development, and optimize the use of labour. It will also provide health and safety benefits for consumers by increasing the traceability of ingredients and improving the speed and effectiveness of product recalls.

In June 2019, RBC and Microsoft announced the launch of a new digital program aimed at optimizing food manufacturing operations through Industry 4.0 principles.

As with the last industrial revolution, the expectation from a labour market standpoint is that 1) fewer workers will be required (thus easing the pain of labour shortages), and 2) require workers to have a higher level of skill and education.

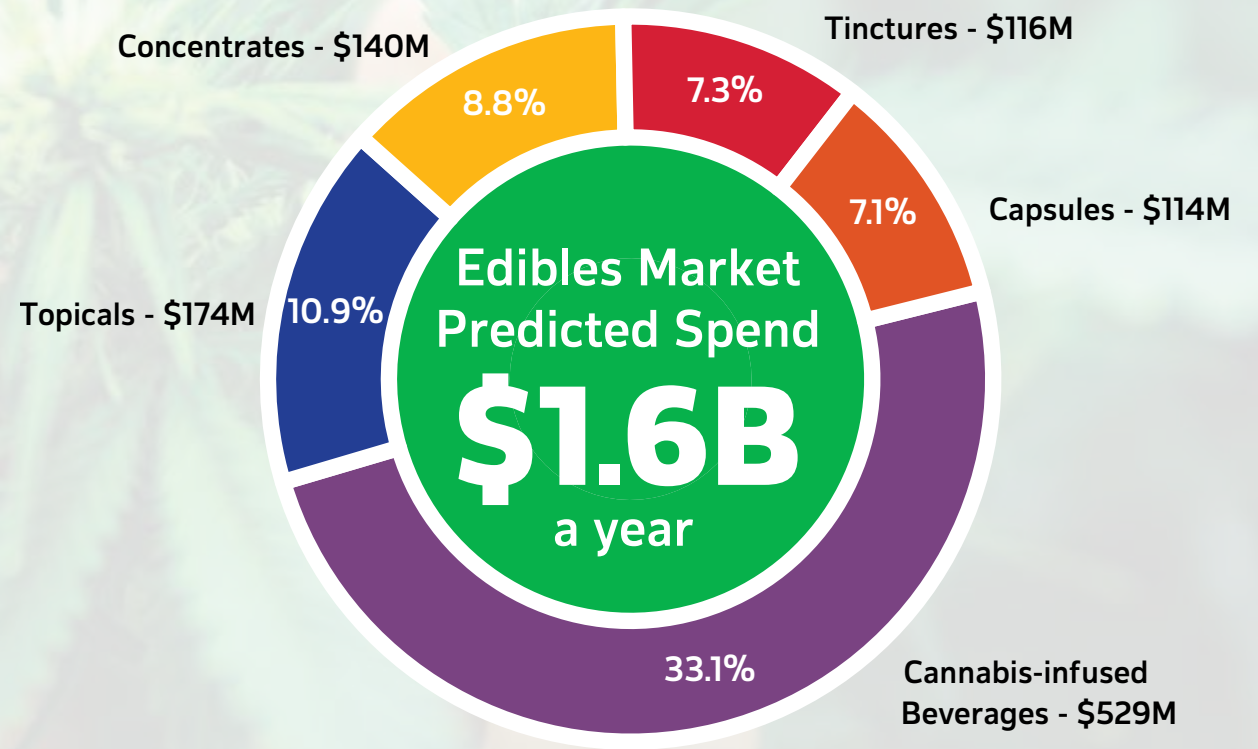
“ Industry 4.0 will allow for an integrated supply chain that will enable businesses to anticipate and respond to consumer needs, reduce the time required for research and development, and optimize the use of labour. ”

4 Cannabis: Edibles and Infused Beverages

Recreational use of cannabis was legalized in Canada on October 17, 2018. Initially limited to dried or fresh cannabis and cannabis oil, legalization was extended in October 2019 to permit the recreational use of cannabis edibles and infused beverages and alternative cannabis products. This change is creating new opportunities for food and beverage processors but also adds a new dimension to the operations of companies who pursue such opportunities, including a new level of regulatory oversight to minimize the public health and safety risk posed by such products and preventing accidental consumption by youth.

The final regulations ban the production of all cannabis products in the same building as food products. In terms of packaging and labelling, the current regulations for dried cannabis are being applied to cannabis edibles and infused beverages, extracts, and topicals. In addition, the regulations are being amended to make it easier for additional product information to be displayed (e.g., list of all ingredients, indication of any allergens, "best before" date, a cannabis specific nutrition fact table). This is all labelling information that the food and beverage processing industry is familiar with, providing it with a competitive edge over established dried cannabis flower producers.

According to the Brookfield Institute, the demand for cannabis in Canada is expected to exponentially increase, driven by the sale of edibles and innovative new products.⁴² More specifically, Brookfield predicts that the cannabis economy will create immense new market opportunities in retail, product development, and healthcare, and that individuals soon may spend their entire professional career working in the cannabis industry and target their skills training to meet the demands for innovation in the sector.



“According to Indeed.com, job openings in the cannabis industry tripled from July 2018 to July 2019 and were expected to keep growing as edibles became legal.”



More information on the cannabis sub-sector can be found in FPSC's 2020 labour market report, *Cannabis Industry and Edibles*.

The recent survey of food and beverage processors asked about processors moving into infused beverages or edibles. The responses were clear that it wasn't an area where many food and beverage processors were looking to expand with 79% saying no, only 4% saying yes and 18 % unsure or would consider it at a later date.

According to Deloitte's latest annual report on Canada's cannabis industry, it projects that the edibles market is worth at least \$1.6 billion a year. For its part, Health Canada estimates cannabis products, other than dried cannabis, will account for just under half of the total market, a similar amount to the portion of sales found in other jurisdictions with legalized cannabis such as California, Colorado, and Oregon. In all, cannabis edibles and infused beverages are believed to generate higher profits for retailers than cannabis products that are already legal. Deloitte predicts Canadians will spend annually \$529 million on cannabis-infused beverages, \$174 million on topicals, \$140 million on concentrates, \$116 million on tinctures and \$114 million on capsules.⁴³

Growth in the cannabis industry, and edibles specifically, is already translating into increased demand for labour. According to Indeed.com, job openings in the cannabis industry tripled from July 2018 to July 2019 and were expected to keep growing as edibles became legal.

More information on the cannabis sub-sector can be found in FPSC's 2020 labour market report, *Cannabis Industry and Edibles*.⁴⁴

5 Climate Change

The food and beverage processing industry will increasingly face constraints on its production because of natural resource limitations induced by climate change. The industry is especially vulnerable to the effects of climate change because many early stages in the food and beverage supply chain depend on weather conditions and other environmental factors.

Consider the following tensions:

- 🌿 **Less Water:** A 40% deficit in the available supply of water is expected by 2030.
- 🌿 **More Land Needed:** Within the same timeframe an 11-14% increase in the amount of undegraded arable land will be needed to meet crop demands.
- 🌿 **More Storage Needed:** The industry will need to find innovative production and storage solutions to continue meeting existing demand as well as the needs of a global consumer base expected to surpass 8.5 billion people by 2030.
- 🌿 **YET – Pressure to Reduce Environment Footprint:** The sector will also be challenged by consumers and government to reduce its environmental footprint (e.g., consumption of water and energy, treatment of waste).

These issues, along with the larger impact of climate change on labour productivity, transportation, and energy, will combine to constrain the supply of food and beverage products available for processing.

However, climate change can also present opportunities for some processors, for example, through improved growing conditions for Canadian grapes used by Canadian winemakers.⁴⁵

There are a number of opportunities - reducing carbon footprint, enviro-friendly packaging, use of ethical/green supply chains - that exist for businesses to distinguish themselves in the eyes of their employees and customers.



Less Water

A 40% deficit in the available supply of water is expected by 2030.



More Land Needed

Within the same timeframe an 11-14% increase in the amount of undegraded arable land will be needed to meet crop demands.



More Storage Needed

The industry will need to find innovative production and storage solutions to continue meeting existing demand as well as the needs of a global consumer base expected to surpass 8.5 billion people by 2030.



Pressure to Reduce Environment Footprint

The sector will also be challenged by consumers and government to reduce its environmental footprint (e.g., consumption of water and energy, treatment of waste).

Section 5

Labour Trends

This section covers a significant amount of ground. We begin by noting that the food and beverage processing sector experienced very strong employment growth in 2017, 2018, and 2019 after almost a decade of stagnation, with the largest employment gains in the Beverage Manufacturing sub-sector. Despite the pandemic, 2020 employment was 98% of 2019 and still above the 2018 level. This section also includes a discussion on the sector's relatively... of the sector's relatively high job vacancy rate and the financial impact that unfilled positions are having. Essentially, a high volume of vacancies restrict output, leading to lost revenues for businesses.

Persistent job vacancies, along with other labour market challenges (e.g., public perceptions of work in the food and beverage processing sector), have obvious implications for the sector's ability to reach some of the ambitious targets set for it by the Agri-Food Table (e.g., \$85 billion in export sales by 2025). Some of these challenges are highlighted below.

Turning to the future, this section highlights forecasted hiring needs based on two different growth scenarios and ends with a presentation of workforce demographic and occupational profiles, including an analysis of compensation and unionization.





10%

Skilled trades workers account for the total industry's workforce

“ The industry had a very strong employment growth in 2017 and 2018 after almost a decade of stagnation. ”

Industry 4.0 could reduce industry hiring needs by **20%**

32,000 workers needed to maintain status quo in 2025

Strong Employment Growth but with Persistent Job Vacancies

The industry had very strong employment growth in 2017 and 2018 after almost a decade of stagnation. Notwithstanding, the employment vacancy rate in 2018 was about 25% higher than it was for manufacturing in general (3.8% vacancy vs 3.0%).

The analysis presented in this report highlights the actual cost of job vacancies in the industry, and it's sobering. Estimates show that a single unfilled position in the food and beverage processing industry could cost businesses as much as \$190 per day in lost net revenue⁴⁶. Aggregated over the entire sector, losses from job vacancies could total up to an estimated \$8.5M in net revenue per day.

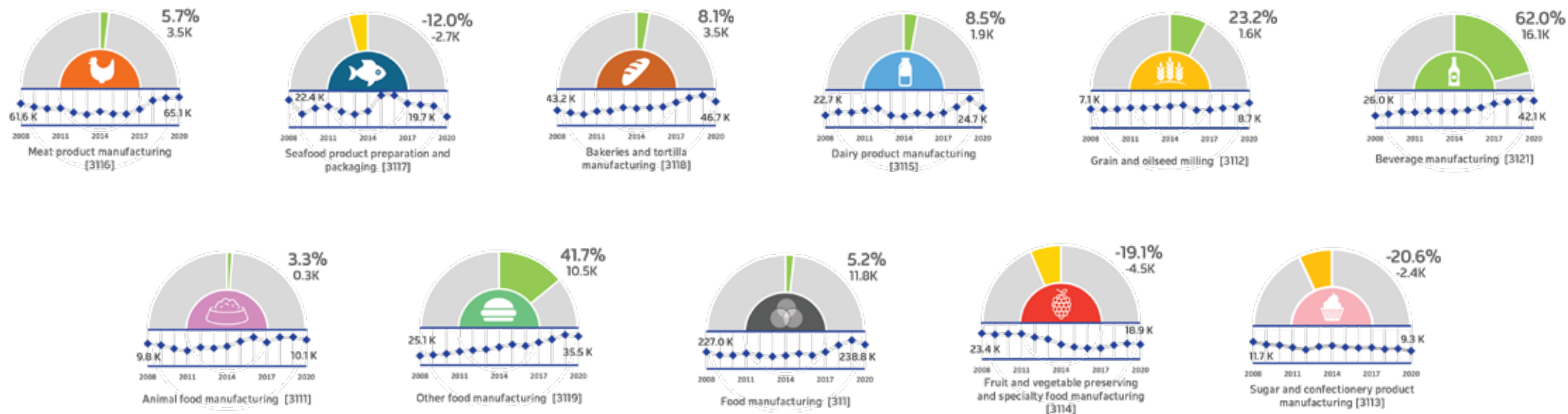
The number of people working in the industry increased by just over 10 per cent between 2010 and 2020, from just over 250,000 to just over 280,000, with most of this growth occurring in 2017, 2018, and 2019.⁴⁷ The industry remains the biggest provider of manufacturing jobs, accounting for 19.5 per cent of total manufacturing employment in 2020, an increase from 2019⁴⁸ and up from just over 13 per cent in 2001.⁴⁹



There are significant differences at the sub-sector level, with the largest employment gains in the last decade in the Beverage Manufacturing sub-sector (+42%), followed by Other Food Manufacturing (+30%) and Grain and Oilseed Milling (+18%). Some other sub-sectors saw employment declines between 2011 and 2020, including Fruit and Vegetable Preserving and Specialty Food Manufacturing (-19%), Sugar and Confectionery Product Manufacturing (-9%) and Seafood Product Preparation and Packaging (-8%).⁵⁰

Yet despite this growth, the job vacancy rate in 2019 (3.8 per cent ⁵¹) was the highest annual rate since Statistics Canada's Job Vacancy and Wage Survey began in 2015 and above the 2.9 per cent job vacancy rate for the overall manufacturing sector. There were also significant regional differences in the food and beverage processing industry, with the highest vacancy rates in PEI (8.6%) and the lowest in Manitoba (1.6%).

Normalized Employment Growth in Food and Beverage Processing by Sub-sector, 2008-2018



The Cost of Vacancies

The job vacancy rate, which expresses the number of job vacancies as a percentage of labour demand (i.e. all occupied and vacant jobs), provides insight into sectors and industries that are having difficulty filling job openings. A high volume of unfilled positions can restrict output, leading to lost revenues for businesses and the industry. Assuming a direct relationship between total net revenue and total employment, a single unfilled position in the food and beverage processing industry could cost businesses as much as \$190 per day in lost net revenue.⁵² FPSC's 2020 employer survey found that food and beverage processors had an average of six vacant positions. With over 7,600 businesses (excluding those without employees) in the food and beverage processing industry, industry-wide losses from job vacancies could total up to staggering \$8.5M in net revenue per day. Assuming that the level of vacancies is constant throughout the year the \$8.5M per day becomes \$3.1B per year.

**Average Number
of Vacancies** (from
survey)



**Average Cost
per Day** **\$190**

\$1.1K **Average Daily Cost to
Employer**

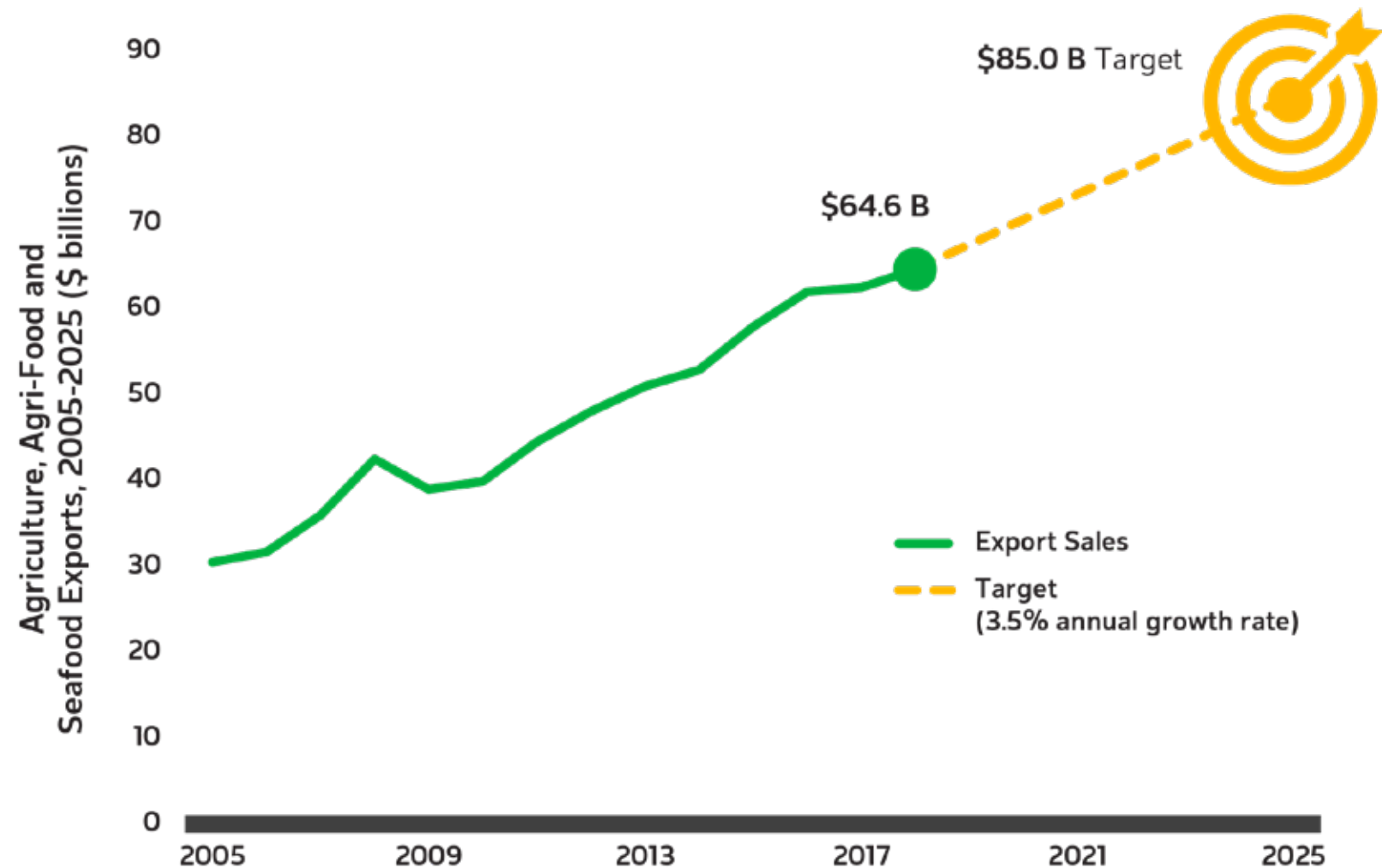


7600
Number of Employers 2019

-\$8.5M
**Average Daily Loss
of Revenue**

-\$3.1B
**Average Yearly
Loss of Revenue**

Agriculture, Agri-food and Seafood Exports, 2005 to 2025



How Many Workers Does the Sector Need?

Looking ahead, the Agri-Food Table set an ambitious target for agri-food and seafood export growth in its 2018 report, aiming for \$85 billion in export sales by 2025, a 32% increase from \$65 billion in 2017. The report also set a target of \$140 billion in domestic sales by the same year.

So, what is needed to actually achieve these targets? There is no doubt that a significant influx of new workers is needed, but how many? Consider the following two scenarios - one that models the number of workers needed to simply keep going at the status quo (the "baseline scenario"), the other a model of how many workers are needed to meet the growth target ("the growth scenario"):

1. "The baseline scenario" is where export growth is tied to a United Nations forecast of world population growth, and
2. "The growth scenario" is an alternative scenario where the Agri-food Table's \$85 billion export target is met by 2025.

As with any economic modeling a number of assumptions were required, first both scenarios assume labour replacement demand due to retirements which amounts to 2.0% of the total workforce annually. Second, an assumption of 1.0%

growth in labour productivity to capture the impact of workers and their equipment becoming more effective over time. In both "scenarios" growth in imports and domestic consumption is tied to forecasts of Canadian population growth, while growth in inter-industry sales is based on a forecast of Canadian real GDP growth.

Also, forecasts of hiring needs must consider two different types of labour demand:

1. "Expansion demand", or the hiring necessary for industry growth, and,
2. "Replacement demand", or the hiring necessary to replace individuals who exit the workforce due to retirement.

Replacement demand represents the primary source of demand for new workers in both scenarios due to the aging workforce seen both in the manufacturing sector as a whole and the food and beverage processing industry specifically.

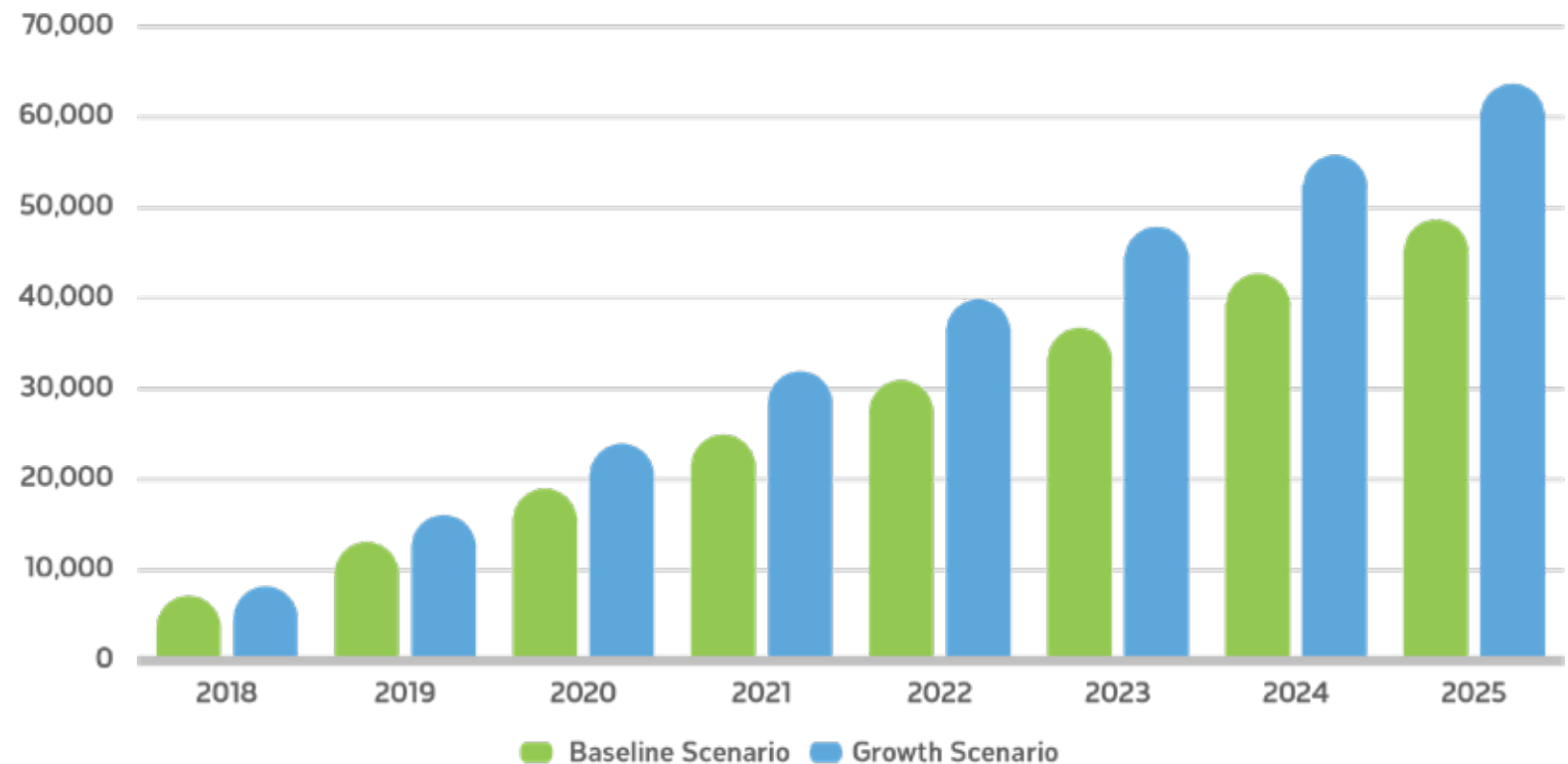
When both expansion and replacement demand are considered together, the total hiring requirement for the industry over the 2020-2025 period in "the baseline scenario" is estimated at about 32,000, or 11% of the industry's workforce in 2020. Put another way, the sector will need about 32,000 new workers just to maintain the status quo over this this period.

“ A high volume of unfilled positions can restrict output, leading to lost revenues for businesses and the industry ”

Cumulative Food and Beverage Processing Hiring Requirement, 2020-2025

In "the growth scenario", the total hiring requirement rises to 56,000 workers, equivalent to 20% of the industry's 2020 workforce.

These figures could be even higher if, for example, labour productivity rates are below anticipated levels as some experts predict. Clearly, recruiting and retaining qualified workers will be crucial to ensuring the continued growth of the industry, as well as adopting new and innovative ways of processing.



Source: Prism Economics and Analysis

The Skilled Trades Landscape

Canada's food and beverage processing sector (NAICS 311) employed an estimated 29,000 skilled trades workers in 2019, accounted for 10.3% of the total workforce. Skilled trades made up the largest proportion of the food manufacturing workforce in the provinces of Saskatchewan (13.5%) and PEI (12.6%), while Newfoundland and Labrador had the lowest share (7.9%). Trades working as Installers, Repairers and Service Material Handlers (NOC 74) account for 31% of trades, followed by Transport and heavy equipment operation and related maintenance occupations (25%) and Maintenance and equipment operation trades (24%). The industry also employs significant numbers of industrial, electrical and construction trades, Power engineers and power systems operators and Technical occupations in electronics, computers and IT (see Figure 1).

Looking across individual food manufacturing sectors, Beverage manufacturers employ the largest share of skilled trades (20.6%) followed, followed by Grain and oil seed milling (19.1%) and Animal food manufacturing (17.3%). Seafood processors (7.2%) and Bakeries (7.4%) employ the fewest (see Figure 3).

Table 1

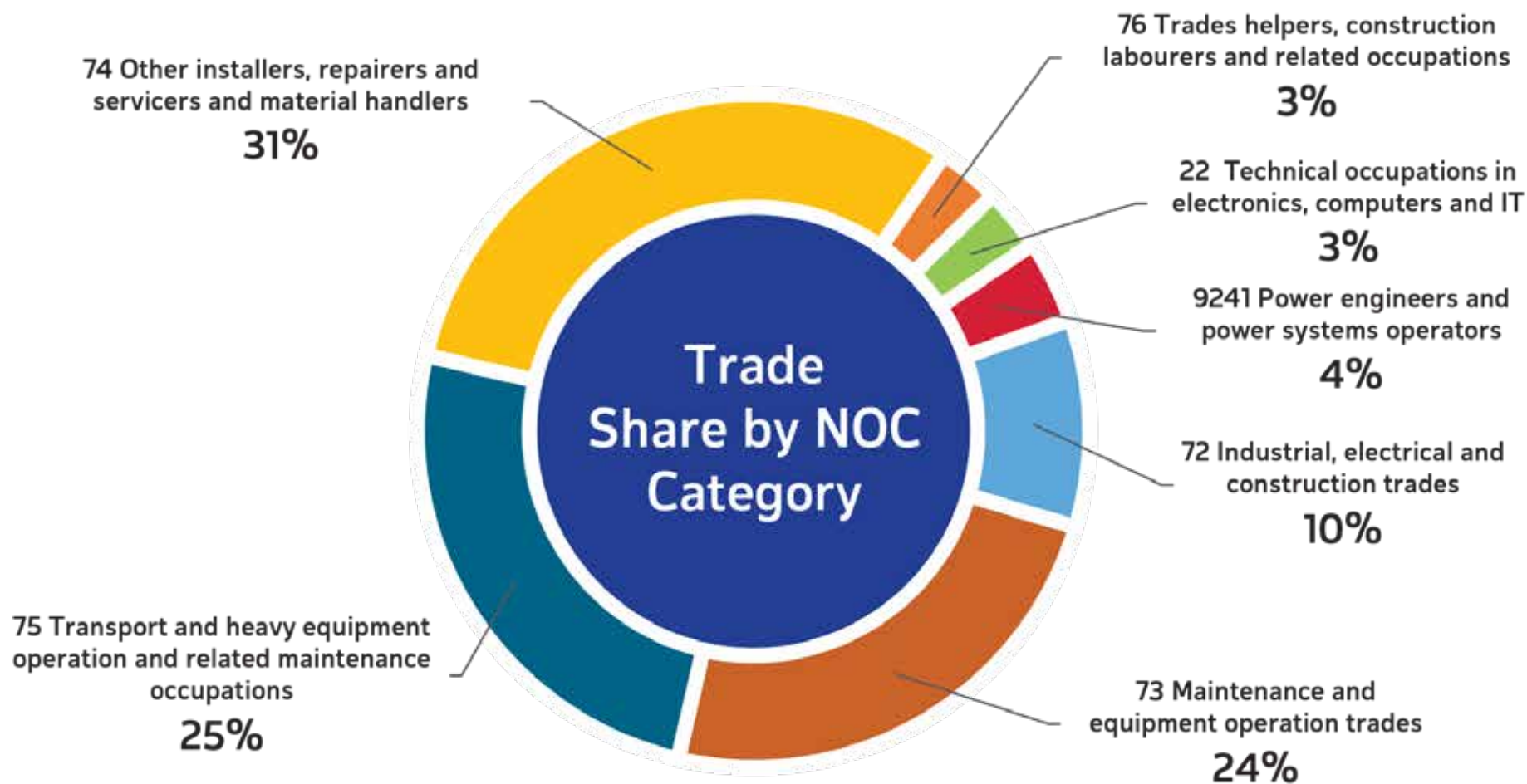
Skilled Trades Employment in Food Manufacturing, by Province, 2019

| Province | Employment | Share of Total |
|----------------------------------|--------------|----------------|
| Canada | 28,956 | 10.3% |
| Newfoundland and Labrador | 313 | 7.9% |
| Prince Edward Island | 307 | 12.6% |
| Nova Scotia | 773 | 10.5% |
| New Brunswick | 727 | 8.5% |
| Québec | 8,227 | 10.8% |
| Ontario | 11,393 | 10.4% |
| Manitoba | 1,249 | 10.8% |
| Saskatchewan | 745 | 13.5% |
| Alberta | 2,771 | 10.8% |
| British Columbia | 2,706 | 9.2% |

Source: Statistics Canada, Prism Economics

Figure 1

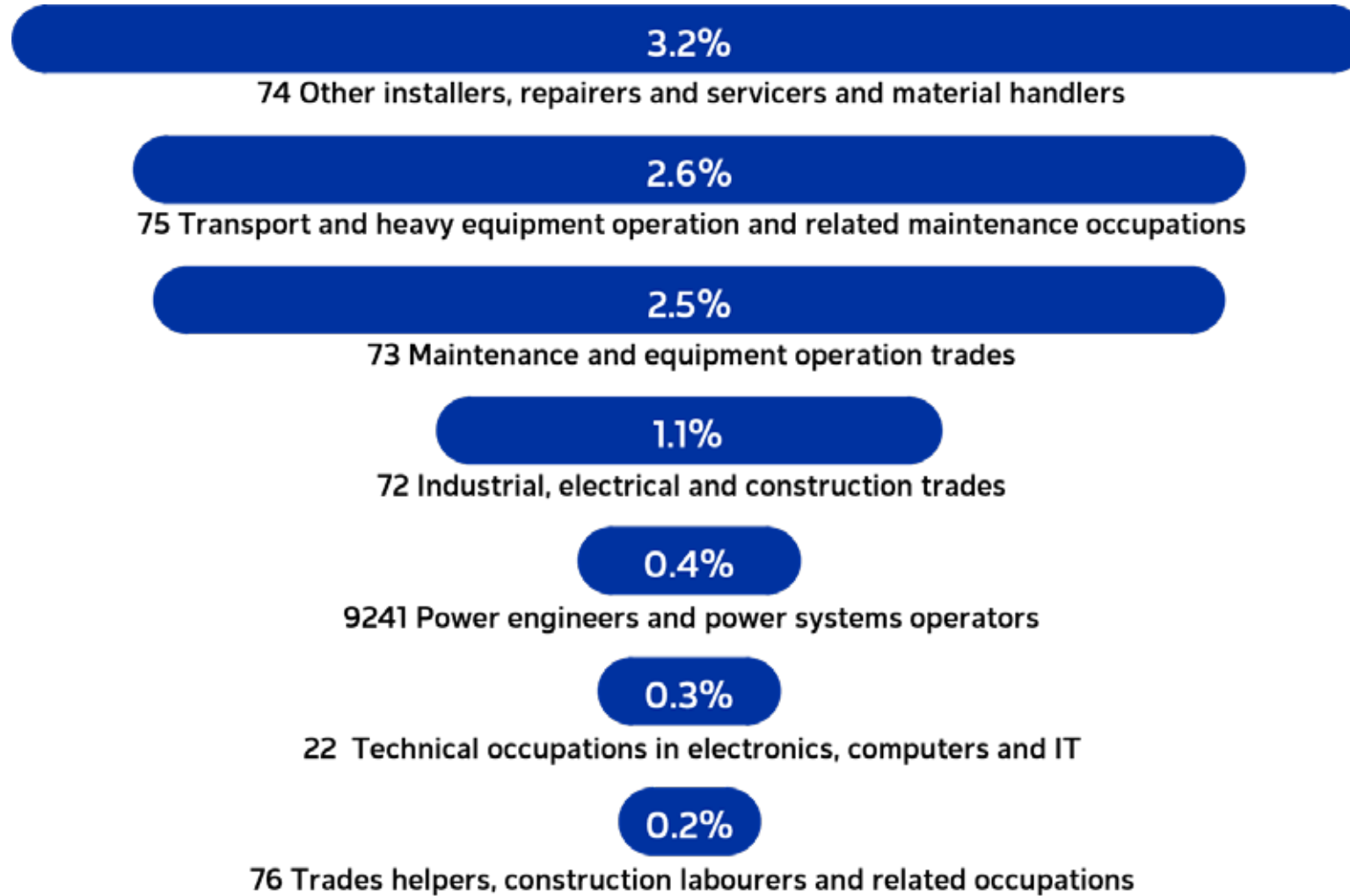
Skilled Trades Employment in Food Manufacturing, by Province, 2019



Source: Statistics Canada, 2016 Census

Figure 2

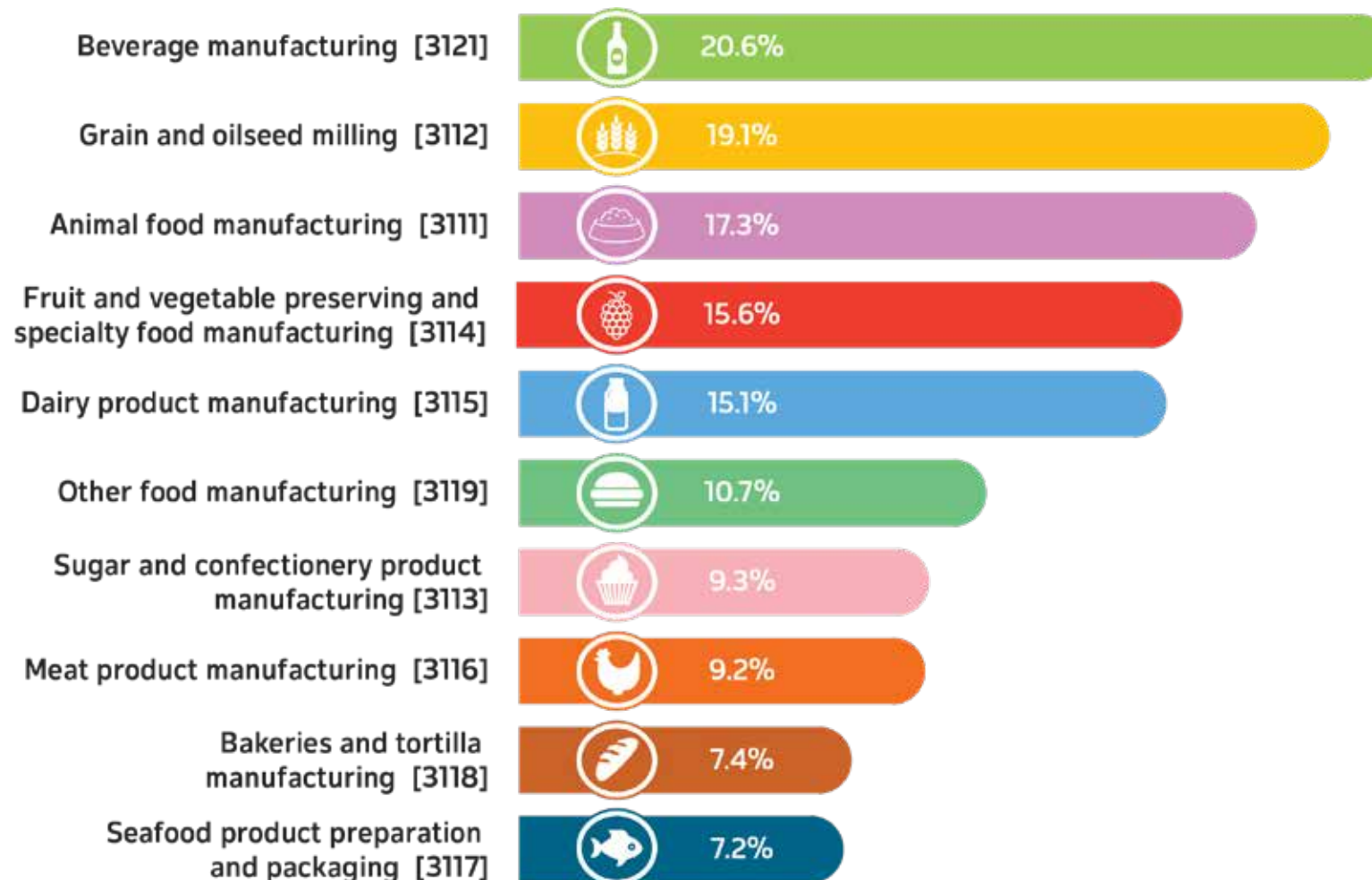
Skilled Trades Employment Share of Total Food Manufacturing, by Trade Group



Source: Statistics Canada, 2016 Census

Figure 2

Skilled Trades Employment in Food Manufacturing, by Food Manufacturing Sector



Source: Statistics Canada, 2016 Census

Can innovation reduce our reliance on more workers?

There are several potential barriers to achieving the Agri-Food Table's targets for the industry, including a lack of investment, trade barriers and tight labour markets (restricted foreign workers). To meet these targets, all levels of government must work alongside the industry to improve competitiveness and investment. There must also be development of a skilled labour pool and changes to regulatory barriers hindering growth.

One way to mitigate these barriers is investing in new technologies, particularly integrating Industry 4.0 production processes. Research shows that Industry 4.0 integration could boost labour productivity by as much as 0.8% annually.

That may not sound like much, but this research shows that complete Industry 4.0 integration of the food and beverage processing industry over the next five years could reduce estimated hiring requirements by as much as 20%, from 56,000 to just over 43,000. While it is unlikely the entire industry will be able to move fully

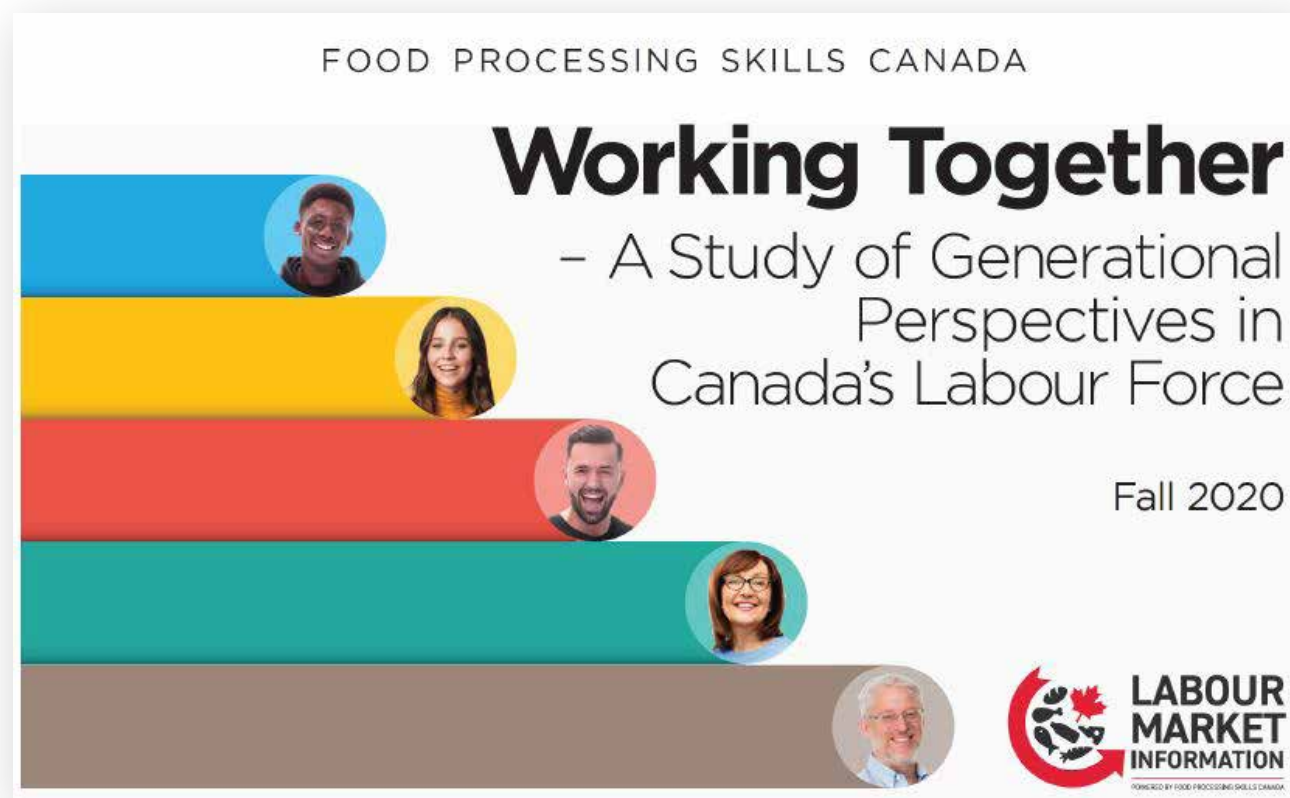
to Industry 4.0 in the near term, it's encouraging to learn many businesses have already begun this process. In the 2020 employer survey, three-in-four (78%) companies reported that their organization has made at least some effort towards complete integration of Industry 4.0 production processes, consisting of investment into automation, digitization or wireless interconnectivity. One-in-four (23%) surveyed companies had already achieved a high level of Industry 4.0 integration. As organizations continue to adopt more advanced technology, additional training will be required to ensure employees are adequately equipped to use such technology.

“ Research shows that Industry 4.0 integration could boost labour productivity by as much as 0.8% annually. ”

Public Perceptions of the Sector

Public perceptions of working in the sector has a significant impact on the labour market. To understand this better, FPSC conducted a survey in 2018 to gather insights into the perceptions, interests and motivations of key target audiences: youth, Indigenous People, New Canadians and those with a tenuous connection to the workforce (currently unemployed and/or frequently unemployed). Members of the general public were also surveyed to provide a benchmark.

In total, 2,089 people responded, 972 of which were part of the youth group, 506 part of the Indigenous People group, 500 part of the new Canadians group, and 1,205 part of the unemployed group. Due to the nature of these groups, there was some overlap between them. In other words, some people were included in more than one segment. The general public benchmark sample included 1,248 people.



Similar to the general public, the four target audiences had a relatively low awareness of the food and beverage processing sector, but broadly viewed the sector more positively, and were more willing to consider taking a job in the sector. Specifically, the survey asked respondents to evaluate four specific jobs in the sector, from an entry level position to operations manager. The target audiences were much more interested than the general public in applying for all four jobs profiled. An Operations Manager position generated the most interest – 37% new Canadians, 32% of youth, and 28% of Indigenous People said they would apply, compared to only 18% of the general public.

The target audiences, however, were also more likely to associate the sector with negative terms. For instance, they were less likely than the general public to use terms "happy workforce", "innovative", "high pay" and "high skill" in reference to jobs, and more likely to use terms like "slow" and "not able to progress."



“ **As Generation Z ages into Younger Millennials, advancement becomes more important. They hope to see a path forward and are particularly keen to learn new things.**





Observation 1

The hypothesis that certain labour market segments (i.e., Youth, Recent Immigrants, Indigenous People and those who are tenuously attached to the labour force) are more predisposed and open to working in the food and beverage processing industry than other Canadians was confirmed.

Observation 2

Consistent with the results of the initial analysis described above, recent immigrants emerged as a particularly promising segment. The deep dive analysis, however, also highlighted Indigenous People as equally receptive to working in the food and beverage processing industry, if not more so.

Observation 3

Analysis of Statistics Canada labour force data suggests that the window of opportunity for hiring recent immigrants narrows over time. In 2018, the unemployment rate among immigrants who had lived in Canada between five and 10 years was about one-third lower than it was for those who had live here for no more than five years.

Section 6

Workforce Demographics

The most striking aspect of the industry's workforce is the age demographic.

24% of the workforce is aged between 55 and 64, with the majority of these individuals eligible to retire in the next 10 years. Men make up 60% of the workforce and immigrants 31% - an overrepresentation when compared to only 23% of the overall labour force. Indigenous Peoples make up 3% of the workforce which is 1% less than the overall labour force.

More than half of the industry's workforce is made up of labourers followed by process control and machine operators, and fish plant workers. The average hourly pay continues to lag behind other manufacturing sectors, but the gap has narrowed significantly over the last 10 years.

Unionization within the industry remains at a higher level relative to other sectors of the Canadian economy, with 27% of food and beverage processing workers unionized in 2018. Close to 60% of unionized workers are in Ontario.





Employing the largest proportion of visible minorities is **41%** Meat Manufacturing

“ The defining demographic characteristic of the sector's labour force is an overrepresentation of immigrants. Approximately one-third (31%) of the industry's workforce consists of immigrants, compared to only 23% of the overall labour force. ”

Men make up **60%** of the food and beverage manufacturing workforce

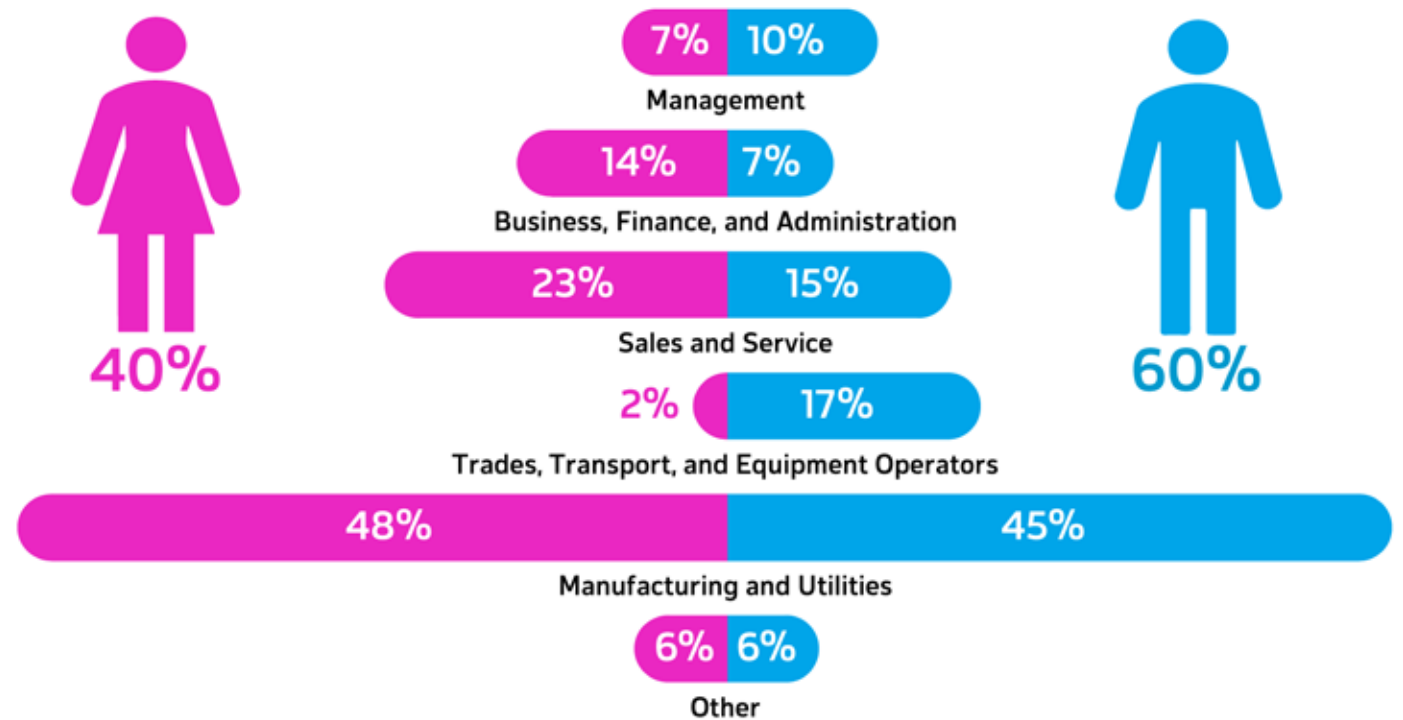
36% of immigrant workers come from the Philippines

Perhaps the defining demographic characteristic of the sector's labour force is an overrepresentation of immigrants. Approximately one-third (31%) of the industry's workforce consists of immigrants, compared to only 23% of the overall labour force.

Men make up 60 per cent of the workforce, with the largest share of male workers in the Grain and Oilseed Milling sub-sector (74%), followed by Beverage Manufacturing (72%), Animal Food Manufacturing (68%) and Dairy Product Manufacturing (67%). Just two sub-sectors have a higher proportion of women than men working in them: Bakeries and Tortilla Manufacturing (52%) and Sugar and Confectionery Product Manufacturing (51%).

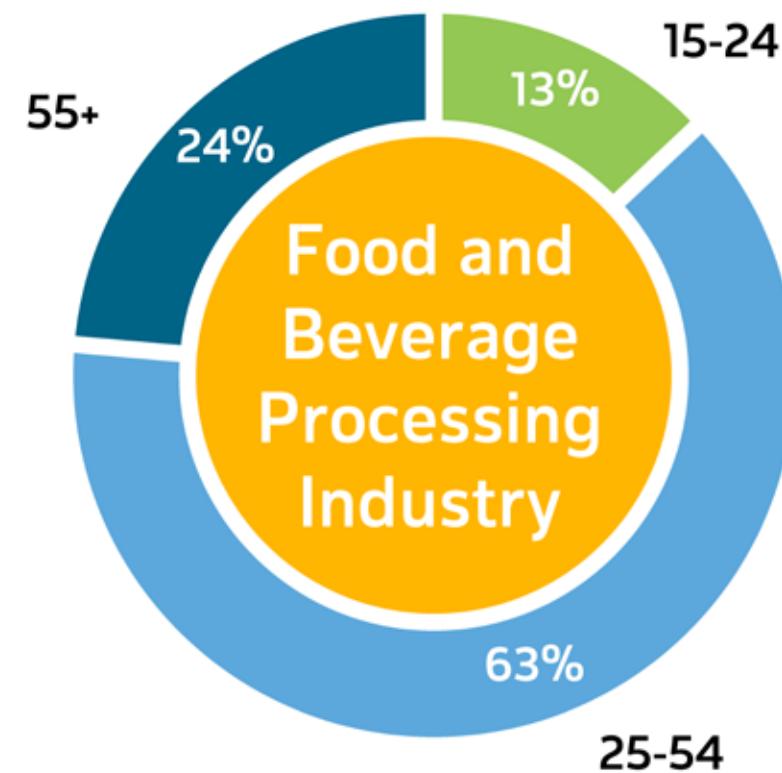
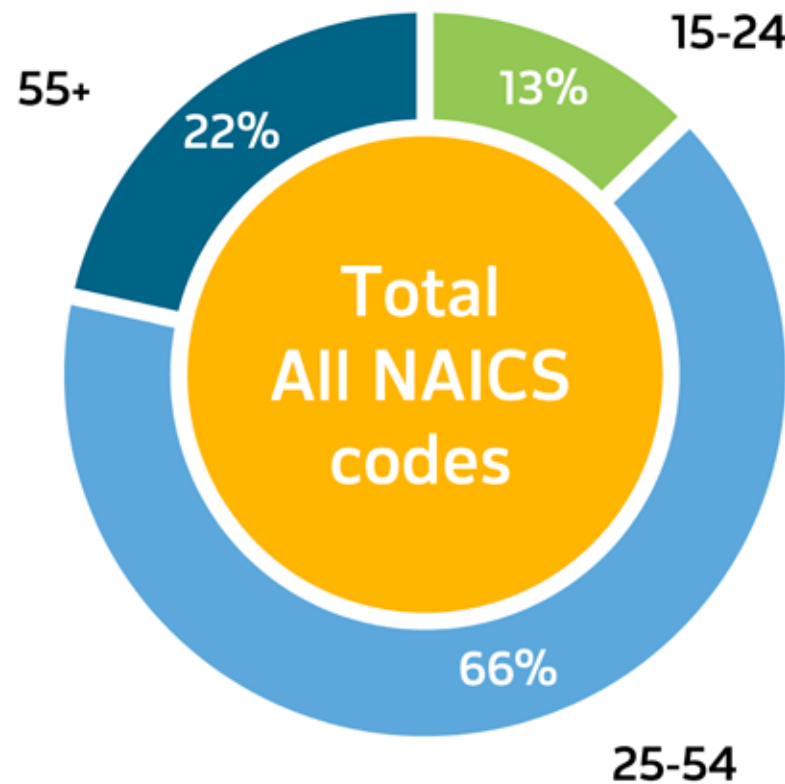
Overall, there is a higher proportion of men than women working in management positions and as tradespeople or transport and equipment operators, while women make up a larger share of business, finance and administration positions, and sales and service occupations.

Food and Beverage Processing Industry Workforce by Job Family and Gender, 2016



The majority of the industry's workforce is between the ages of 25 and 54, although this cohort has declined in size by more than 10 per cent since 2006. One-quarter (24%) of the workforce is aged between 55 and 64, with many of these workers eligible to retire over the next decade.

Approximately one-third (31%) of the industry's workforce consists of immigrants, compared to only 23% of the overall labour force.



Source: Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016361.

Further analysis reveals that in 2016 most of the immigrants who worked in food and beverage processing arrived in Canada between 1991 and 2010, while more recent immigrants (those who arrived in Canada between 2011 and 2016) made up five per cent of the workforce. The latest survey showed that recent immigrants (2014-2019) increased to 9%. In the census, 31% of the workforce were identified as immigrants (all lengths of time in Canada). Given, the recent survey that indicates 9% of immigrants had arrived in the last 5 years, we can conclude that employers are doing well in retaining immigrant workers.

The survey also showed that the most common nations that the industry's immigrant workforce come from are Philippines (36% of respondents have staff from there), India (33%), China (27%), Mexico (24%) and USA (20%). There were 10 nations that appeared in the responses of at least 10% of employers. The survey also looked at which language groups are spoken by staff, Canada's official languages were clearly top followed by Southern European Languages (e.g. Spanish, Portuguese and Italian), South East Asian languages (e.g., Thai, Vietnamese and Tagalog) and South Asian (e.g., Punjabi, Hindi and Urdu).

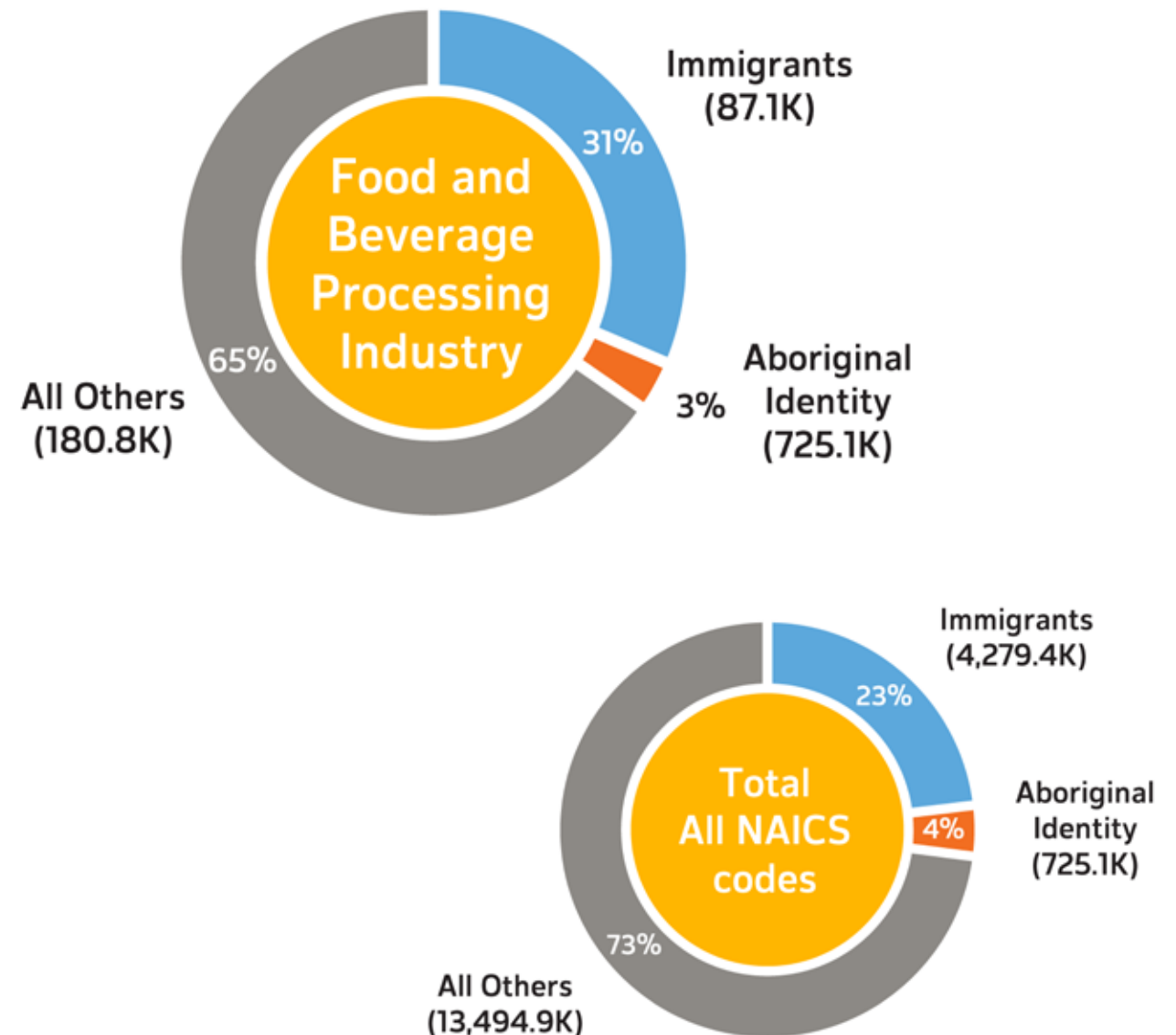
The highest proportion of immigrants work in Meat Product Manufacturing (43%), Bakeries and Tortilla Manufacturing (43%) and Other Food Manufacturing (42%). The sub-sectors with the lowest proportion of immigrant workers are Seafood Product Preparation and Packaging (9%) and Animal Food Manufacturing (15%).

“ The recent survey concludes that employers are doing well in retaining immigrant workers. ”



Indigenous People make up about three per cent of the industry's overall workforce, spread across all sub-sectors, except Seafood Product Preparation and Packaging, where they make up 11 per cent of employees. On a provincial level, the highest proportions of Indigenous workers in the industry are in Nova Scotia (10%), Newfoundland and Labrador (9%) and Saskatchewan (9%).

“The highest proportion of immigrants work in Meat Product Manufacturing.”



Visible minorities⁵³ account for just over one-quarter (28%) of the food and beverage processing workforce, slightly higher than the proportion working in the overall manufacturing sector (23%). The sub-sector employing the largest proportion of visible minorities is Meat Product Manufacturing (41%) while Seafood Product Preparation and Packaging employs the smallest proportion (10%). This reflects in large part the demographics of the regions where these sub-sectors concentrate their activities.

More than half (55%) of the industry's workforce has either a high school diploma or no certificate, diploma or degree of any kind, compared with 45% of the overall manufacturing workforce. Seafood Product Preparation and Packaging has the highest proportion of lower-skilled workers (72%), followed by Meat Product Manufacturing (61%) while Beverage Manufacturing has the lowest proportion (42%).



The Jobs

More than half of the industry's workforce continues to be made-up of labourers.

Average hourly wages in the sector still lag behind the average for the manufacturing sector, but the gap has narrowed significantly over the past decade.

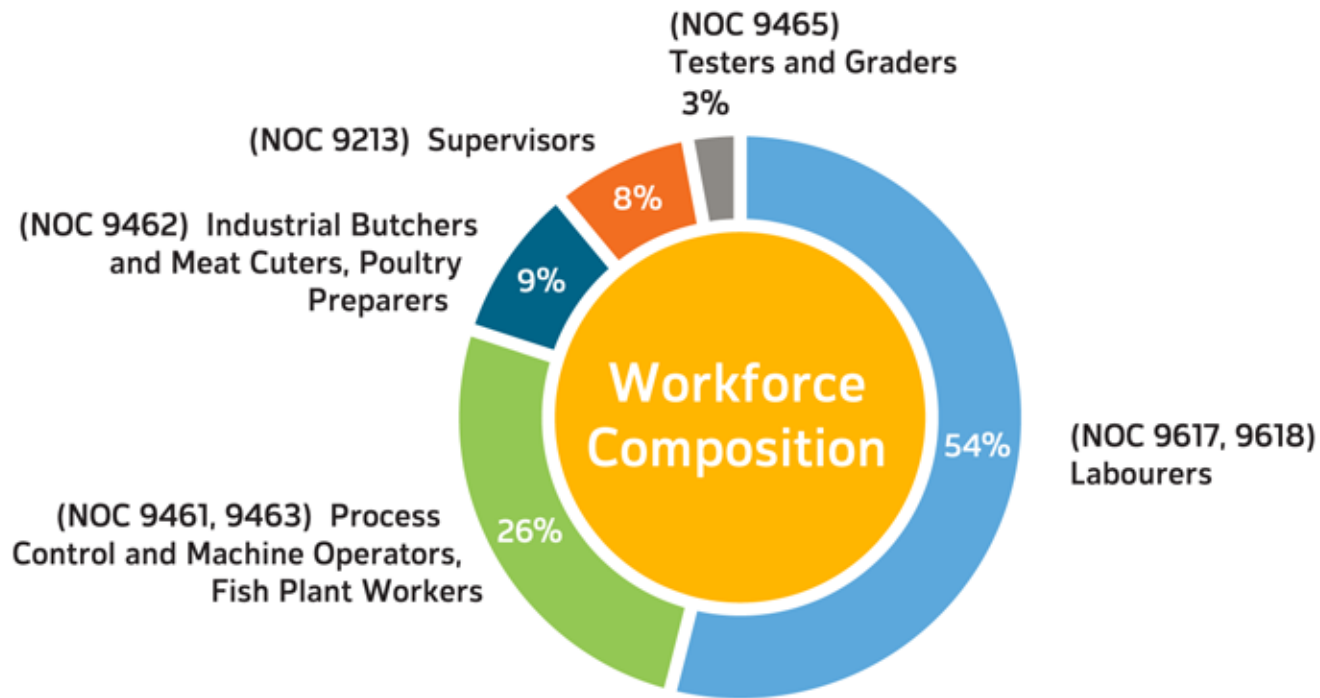
While the rate of unionization in the sector had eroded over the past 10 years, it remains somewhat higher than the average rate of union membership

across all sectors of the economy. Most of the union members in the sector work for one of Canada's five largest food and beverage processing industry employers.

Find following an examination of the nature of jobs in the industry, as well as their relative prevalence. We also present the results of a comparative analysis of wages and the extent of unionization today and over time.

Workforce Composition

Food and Beverage Processing Industry Workforce Composition (NOCs), 2016



Source: Statistics Canada, 2016 Census

Labourers continue to be the largest category of workers in the food and beverage processing industry, representing 54 per cent of the workforce, followed by process control and machine operators and fish plant workers (26%) and industrial butchers and meat cutters, poultry preparers and related workers (9%). Supervisors account for eight per cent of the industry's workforce, with testers and graders (3%) making up the rest.⁵⁴

Men account for most workers employed as supervisors (68%), process control and machine operators (69%), and industrial butchers and meat cutters (69%). In contrast, women are more likely to be employed as testers and graders (61%), and fish and seafood plant workers (61%). Men and women are equally likely to be employed as labourers.

How we pay and how it compares

Wages in the sector are going up, but are still below the overall manufacturing sector. Average hourly wages in the sector in 2018 were \$21.76 per hour⁵⁵ for employees paid by the hour, compared with \$18.14 per hour in 2008.⁵⁶ This rate is about 14 per cent below the average of \$25.33 for the overall manufacturing sector in 2018, though the gap has narrowed somewhat from the nearly 20 per cent differential between 2008 and 2018. Average hourly wages for food manufacturers are highest in Ontario and Alberta, most likely due to competition for labour from other industries, including other manufacturing sectors.⁵⁷

The industry's average hourly wage was also generally lower than that of similarly labour-intensive sectors. Sectors with higher wages in 2018 include forestry and

(\$29.95); construction (\$32.82); mining, quarrying, and oil and gas extraction (\$41.52); and utilities (\$42.84). Lower wages may negatively impact recruitment efforts by food and beverage processors as they compete against these sectors for workers. Sectors with lower wages include arts, entertainment and recreation (\$19.57), and accommodation and food services (\$15.46).

For salaried employees in the industry, the equivalent hourly wages in 2018 was \$32.47, about 12 per cent lower than equivalent hourly wages of \$37.04 for salaried workers in the overall manufacturing sector and \$36.69 across all industries.

Unionization

Unionization within the industry remains at a higher level relative to other sectors of the Canadian economy, with 27 per cent of food and beverage processing workers unionized in 2018. While this percentage has declined from the 32 per cent unionization rate seen during the period of 2010-2013, it is still above the average unionization rate of 24-25 per cent across all industries during the period 2010-2018.

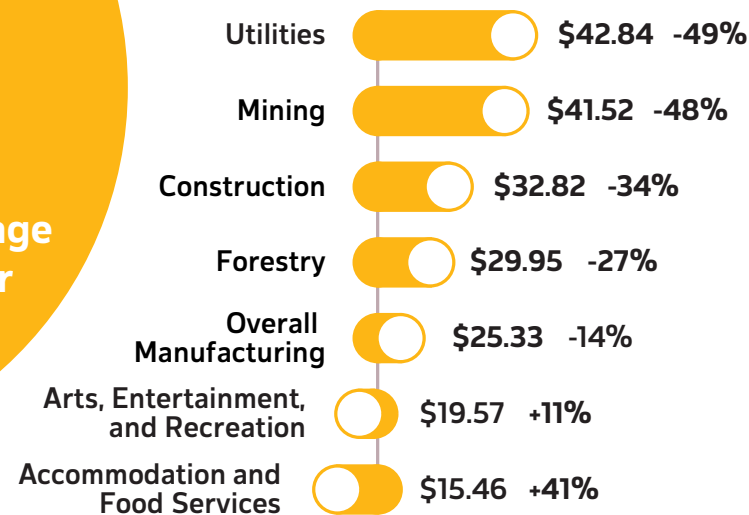
Close to 60 per cent of unionized workers in the food and beverage processing industry are in Ontario, and approximately one-third of unionized workers in Canada are employed by one of the five largest employers in the industry (Black Diamond Cheese™, Coca Cola™, Nestle™, PepsiCo Foods™ and Saputo™).

Food and Beverage Processing
Average Hourly Wage

\$21.76

14% below the average overall manufacturing sector wage of **\$25.33**

Unionization Rate by Industry, 2010-2018



When we examined unionization at a sub-sector level the research reveals that unionization is highest in the Meat Product Manufacturing sub-sector (51%), followed by Grain and Oilseed Milling (40%) and Dairy Product Manufacturing (35%). Three sub-sectors – Beverage Manufacturing (30%), Sugar and Confectionery Products Manufacturing (26%), and Fruit and Vegetable Preserving and Specialty Food Manufacturing (26%) – have unionization rates close to the overall industry average, while the four remaining sub-sectors – Animal Food Manufacturing (11%), Bakeries and Tortilla Manufacturing (17%), Seafood Product Preparation and Packaging (18%), and Other Food Manufacturing (21%) – have below average rates of unionization.⁵⁸

Section 7

Business Priorities and Human Resource Strategies

This section draws heavily on survey data, including a 2020 survey of 740 facilities across the food and beverage processing industry. The survey had excellent coverage reaching processors in every province and at least 50 processors from every sub-sector, excluding cannabis product manufacturing. There was also representation from a variety of employer sizes, with just over half (56%) of the respondents selling products out of province and a third (35%) exporting to the USA.





“ The biggest challenge for employers is accessing a pool of qualified candidates, while skills training was identified as the second largest challenge. ”

4 in 10* companies in the industry reported that they have neither an HR department nor dedicated HR staff.

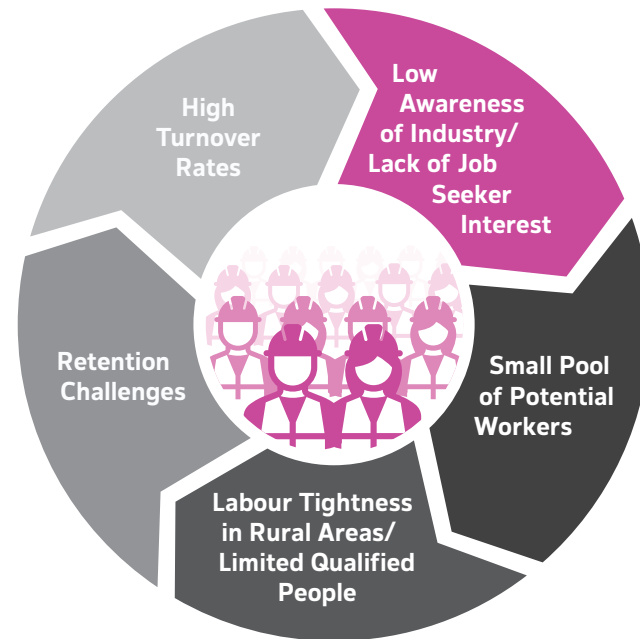
68% of employers face recruitment and retention challenges.

* The exception is Meat Product Manufacturing, where **73%** have an HR department.



The top business challenge in the industry is a people challenge. Consider the following cycle:

Low awareness and willingness to work in the industry leads to small pools of potential workers. This situation is compounded by labour tightness in the non-urban geographic locations of many businesses. Then, among the worker pools, skills are lacking which creates few qualified people that once hired, may lead to retention challenges and high turnover rates.



The research found that labour availability (e.g., lack of qualified applicants) is the top overall business challenge - ahead of coping with regulations. Implementing technology and meeting customer preference round out the top four priorities for employers. In

addition to labour shortages, close to half of companies face turnover and retention challenges. According to a 2018 labour market survey, one of the factors making it more difficult for the food and beverage processing sector to find new workers, is a relatively low awareness of the industry among the general public. Raising awareness has proven to be a significant challenge. The 2020 survey found that employers were split on the best way to promote the sector to the public. That said, the previous 2018 survey also showed that once people learned about the industry, they were more receptive to working in it.

This section includes a discussion of strategies that employers have used to cope with labour shortages and retention challenges. For example, most say they have made a "concerted" effort to target young people and women. Online postings (e.g., LinkedIn) is the most used recruitment method; the survey also found that 16% of employers use the Temporary Foreign Worker Program. Crucially, this section also discusses approaches to skills development from both the employer and worker perspectives.

As discussed earlier in this report, FPSC's 2018 labour force survey suggests that recent immigrants and Indigenous Peoples, and to a lesser extent youth and those with a historically tenuous attachment to the labour force, represent promising recruitment targets for the industry. Related to this, FPSC's 2020 survey of labour participants found that health and wellness options (e.g., free fresh foods, healthy drinks and snacks, comfortable and well-equipped lunch and break rooms, and onsite fitness facilities) are very attractive to young people and women.

Lessons from Previous Studies

Prior to COVID-19, ongoing labour shortages in parts of Canada were expected to cause the food and beverage processing industry to continue its struggle to find workers.⁵⁹

A 2018 in-depth sub-sector labour market analysis for the Seafood Product Preparation and Packaging conducted by FPSC found that, for example, acute labour shortages would worsen if nothing was done to change the situation.⁶⁰ Specifically, the report estimated the number of unfilled vacancies at 1,800 in 2017 and projected that an additional 7,500 workers would be needed by 2030, simply to keep up with the attrition of retirement.⁶¹

FPSC released another detailed labour market information study in 2018, this one examined Canada's Meat Product Manufacturing sub-sector, where there are roughly 1,600 businesses employing approximately 58,000 people (in 2017 ⁶²). This research found that more than half of businesses in the sub-sector were experiencing "chronic recruitment challenges", leaving an estimated 7,300 positions unfilled in 2016. High annual turnover rates (in excess of 40 per cent) compounded difficulties for a sub-sector that was projected to need to hire approximately 32,000 additional workers by 2030 to replace retirees and fulfill growth expectations.⁶³

Research found that more than half of businesses in the Canada's Meat Product Manufacturing sub-sector were experiencing "chronic recruitment challenges".





Recruitment, Retention and Other Challenges

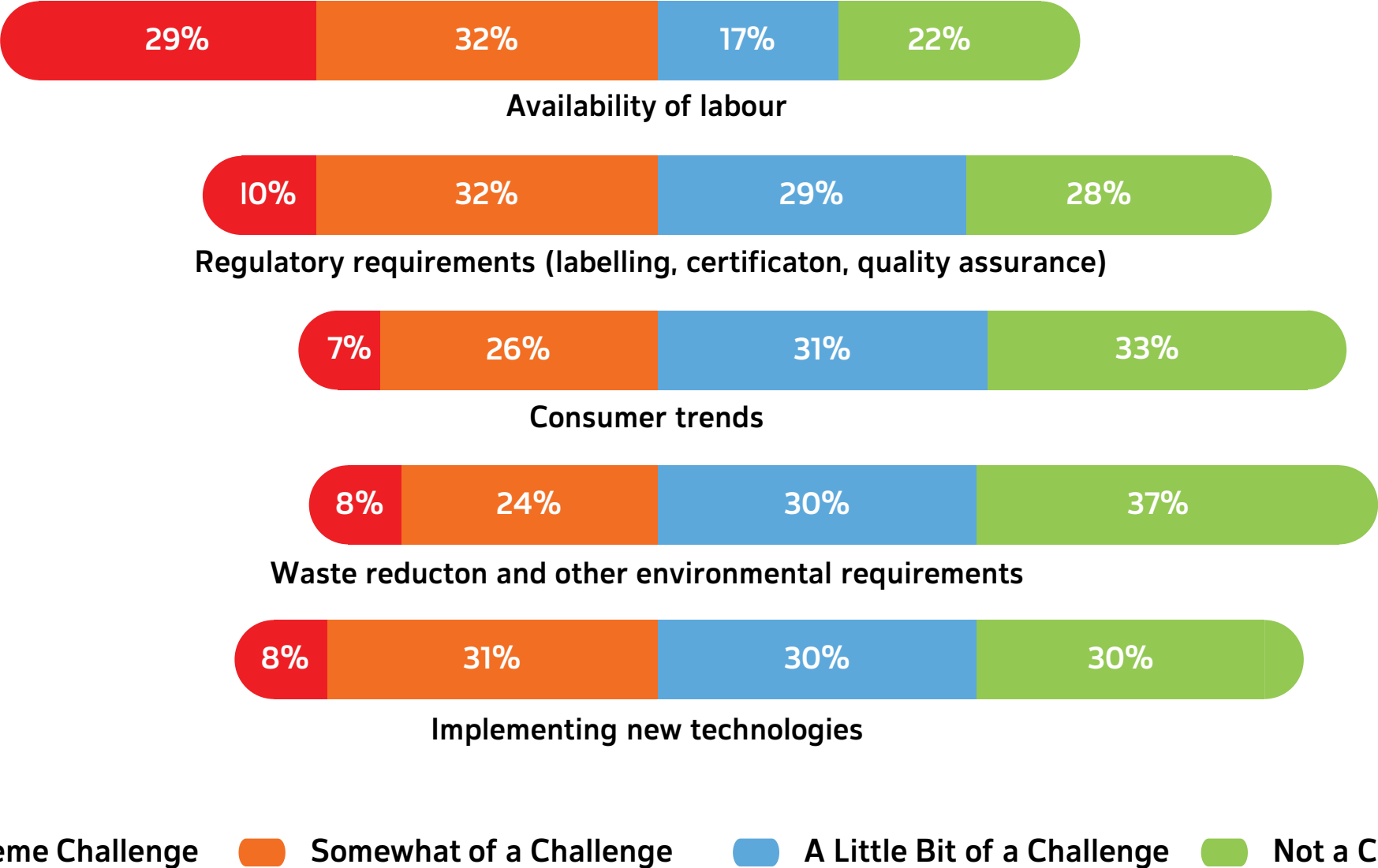
Labour availability is the top overall business challenge, ahead of coping with regulations, implementing technology and meeting customer preference.

Of the 68% of employers who face recruitment and retention challenges, most describe the problem as persistent/on-going. The challenges of recruitment and retention are most keenly felt by Quebec companies. The evidence also suggests that recruitment and retention problems have worsened over the past year.

In its survey of 740 businesses across the food and beverage processing industry, FPSC was able to uncover the extent and nature of the challenges facing companies, and the approaches used to meet these challenges.

The survey results clearly suggest that labour availability is the most significant business challenge facing food and beverage processors, and by a wide margin. Fully 61% of employers rated the issue as at least somewhat of a challenge. In Quebec, the availability of labour is viewed as extremely challenging by nearly half (43%) of employers, while businesses in the Prairie provinces see it as much less of a problem (14%).

How Would You Rate the Following Challenges in Terms of Their Impact on Your Business? (n=740)



Source: Industry Canada, from Statistics Canada, Canadian Business Patterns Database, 2019

It is important to note that 4 in 10 companies in the industry reported that they have neither an HR department nor dedicated HR staff. The exception is Meat Product Manufacturing, where 73% have an HR department, by far the highest among the 11 sub-sectors.

Employers were asked to assess the level of difficulty they experience with a range of specific HR issues, including those associated with hiring and retaining people.

The biggest challenge for employers is accessing a pool of qualified candidates. This was identified as at least somewhat of a challenge by 54% of survey respondents, including 21% who identified it as an extreme challenge. In Quebec, seven-in-ten (71%) employers reported this as at least somewhat of a challenge, compared to approximately one-third in Saskatchewan and Manitoba. Within the industry, the Dairy (70%) and Animal Food (67%) sub-sectors find this challenge more daunting, while employers in Beverage Manufacturing (37%) and Sugar and Confectionery (40%) considered it less of an issue.

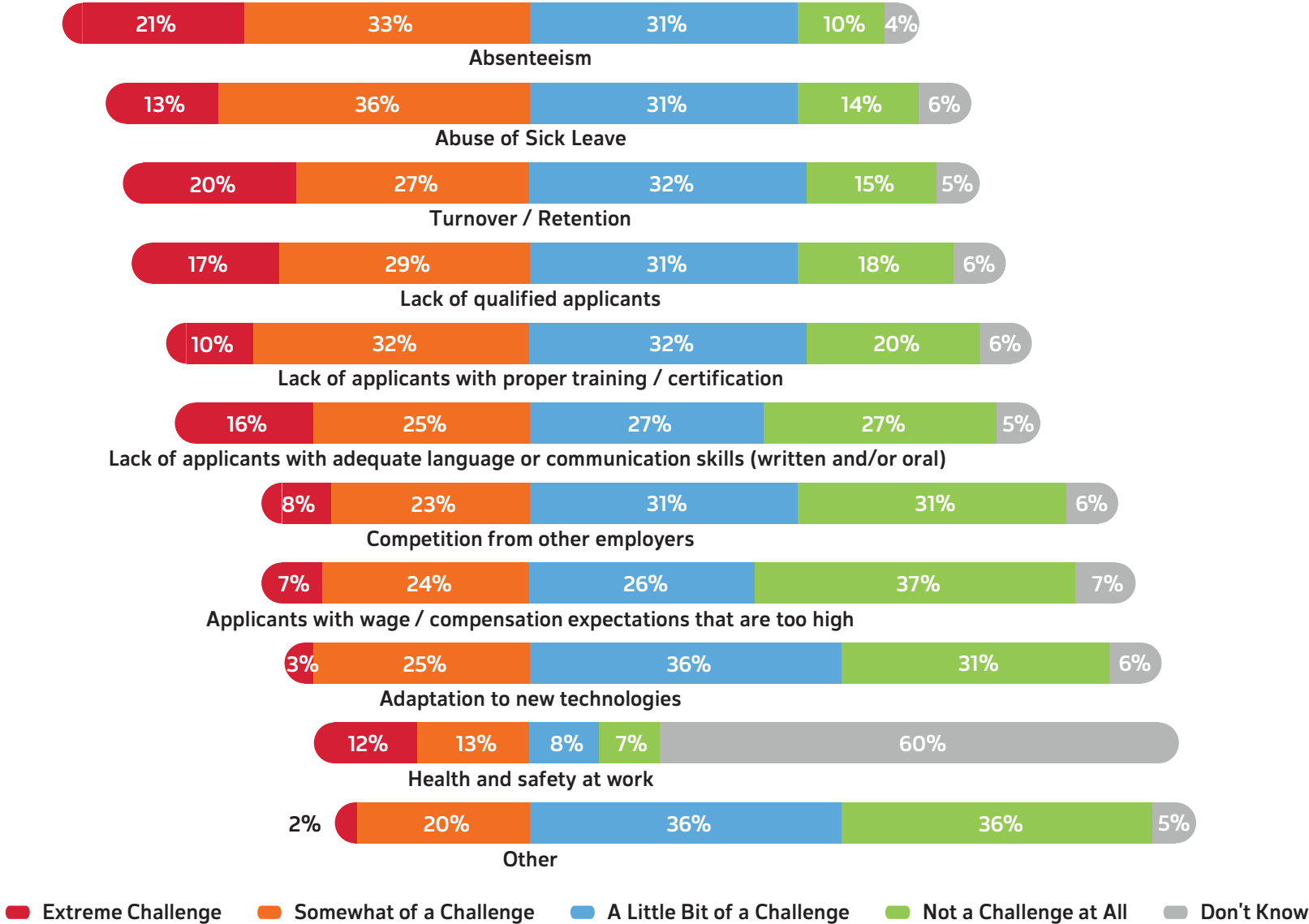
Skills training was identified as the second largest challenge, with almost half of employers saying that a lack of applicants with proper training and/or certification is at least somewhat of a challenge (47%).

High wage expectations, turnover and retention, and absenteeism are all viewed as at least somewhat of a challenge by over 40% of respondents. Health and safety, which was identified as the most important HR issue in a 2011 industry survey, appears to be less of a concern in 2020.



“
The study
finds that most
Canadians
(67%) want to
stay with the
same employer
for as long as
they can.
”

How Much of a Challenge Are the Following Issues When It Comes to Hiring and/or Retaining Candidates? (n=740)



The research also looked into the extent to which recruitment challenges were constant throughout the year, or intermittent/seasonal. Only 32% of employers said that they have "no

significant challenges". Of the close to 7 in 10 who do face recruitment and retention challenges (68%), most describe the problem as persistent and on-going.

How Would you Describe the Challenges of Recruiting and Retaining Qualified Workers? (n=740)



7 in 10
employers face
recruitment and
retention challenges
(68%), and most
describe the problem
as persistent
and on-going.



The prevalence of recruitment and retention challenges appears to vary depending on the region and sub-sector. For example, employers in the sector who operate in Alberta are much more likely to report experiencing no challenges in recruiting (46%) compared to those across the rest of Canada (26%). Conversely, companies in Quebec were twice as likely to report experiencing immediate or persistent challenges. Companies in the Dairy, Meat, Seafood and Bakery sub-sectors were more likely to report immediate and persistent challenges in the recruitment and retention of workers.

Most employers surveyed (57%) in 2020, said that the extent of their recruitment challenges had not changed over the previous year. More significantly, however, those who did report a change overwhelmingly indicated an increase (35%), as opposed to decrease (5%). Consistent with other results, it is clear that the situation is more dire in Quebec, where one half of companies (49%) reported growing recruitment challenges.

And of particular note, the research reveals that recruitment and retention tends to be more challenging in rural parts of Canada.

In 2020, FPSC released a study titled "Working Together – A Study of Generational Perspectives in Canada's Labour Force". This study examined generational perspectives about career-related aspirations, expectations and preferences (e.g., learning, compensation) across the five generations that coexist in the workplace today.⁶⁴ The study finds that most Canadians (67%) want to stay with the same employer for as long as they can. It is interesting to note that views on this question are fairly uniform across the five generations represented in the workplace.

“**The Dairy, Meat, Seafood and Bakery sub-sectors were more likely to report immediate and persistent challenges in recruitment and retention.**”



FPSC published a study in 2020 titled "*Working Together – A Study of Generational Perspectives in Canada's Labour Force*".

Section 8

Recruitment and Retention Tips and Best Practices

Key Recruitment and Retention Findings for Employers:

- 🍁 Traditional benefits (e.g., standard health and dental coverage, personal performance bonuses and free parking onsite) continue to hold broad appeal across generations.
- 🍁 Health and wellness programs (e.g., availability of free fresh foods, healthy drinks and snacks, comfortable and well-equipped lunch and break rooms) are very attractive to young people and women.
- 🍁 Most employers reported making a “concerted” effort to recruit young people and women for employment.
- 🍁 Just over half of employers surveyed (56%) reported offering benefits.
- 🍁 Recent immigrants and Indigenous Peoples, and to a lesser extent youth and those with historically tenuous attachment to the labour force, represent promising recruitment targets for the sector.





“ Recent immigrants and Indigenous Peoples, and to a lesser extent youth represent promising recruitment targets for the sector. ”

Only 1 in 4 Canadians said they are familiar with the food and beverage processing industry.

68% of respondents did not know how much they spend on training annually.

94% of employers offering employee benefits reported providing extended health and drug plans.

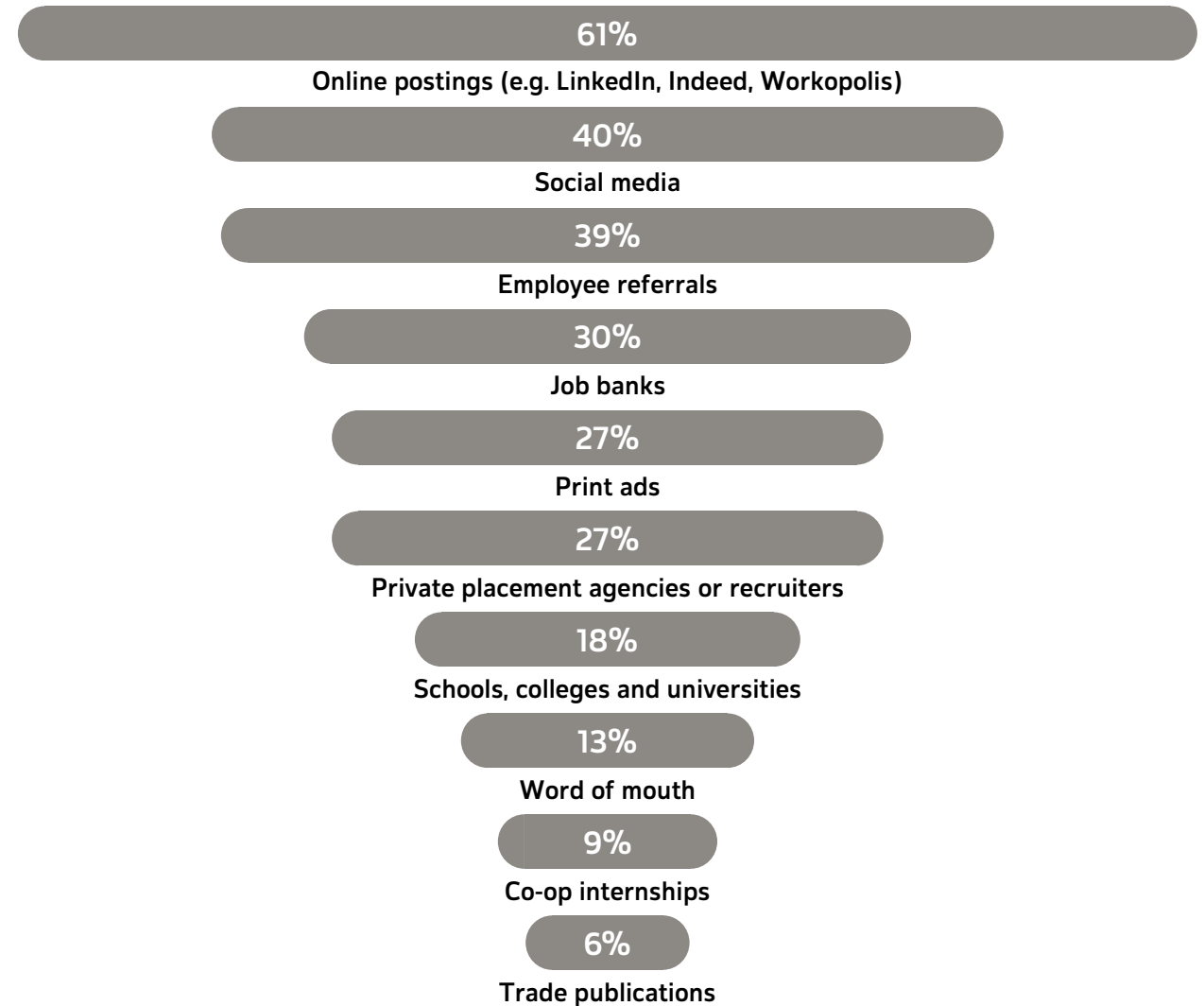


Employer Outreach and Communications

It will come as no surprise that nearly all employers (92%) surveyed allocate at least some resources towards recruiting employees. These employers reported using a broad range of tools and resources to do so.

Technological advancements, as well as the emergence and rapid adoption of social media, have shifted recruiting efforts to online platforms. This stands in contrast to the previous labour market information report published in 2011, where employee referrals were the most common recruitment method. The table on the right shows the prevalence of various recruitment methods within the sector.

What Types of Training Tools are Currently Used in Your Workplace? (N=269)



Temporary Foreign Workers and Other Immigration Programs

Immigrants (or New Canadians) have long been an important source of labour for food and beverage processors, more so than in other sectors of the economy. Over the years, the Temporary Foreign Worker Program (TFWP) has also been used to help fill labour shortages. Use of this program has been more prevalent among large processors (e.g., meat processing) and in Atlantic Canada.

The sub-sector labour market analysis FPSC conducted in 2018 (Seafood Product Preparation and Packaging Meat Product Manufacturing) identified various challenges in accessing the supply of recent immigrants, including the fact that many recent immigrants and refugees choose large urban areas for their relocation to Canada. For rural regions, relocation requires extensive collaboration with the community to ensure that there are sufficient supports in place and settlement services that can be accessed. For seasonal operators (e.g., Atlantic processors) attracting permanent residents is very difficult. Adding to these issues, is the more fundamental problem that the immigration process seems to prioritize education levels rather than the skills the industry needs, resulting in a skills mismatch. In response to these structural issues, many employers have explored the possibility, or are using, the TFWP.

The TFWP was created in 1973 to allow employers to hire foreign nationals – primarily high-skilled workers – to fill gaps in their workforces on a temporary basis. In 2002, the federal government opened the program to “low-skilled” workers, supplementing existing low-skilled streams for seasonal workers and live-in caregivers.



“ In 2002, the federal government opened the TFWP program to “low-skilled” workers, supplementing existing low-skilled streams for seasonal workers and live-in caregivers. ”

Between 2009 and 2014, media reports surfaced of TFWP exploitation by some businesses, and the federal government responded with significant changes to the program, which created barriers to program access for employers (e.g., raising the cost of Labour Market Impact Assessments (LMIA) from \$275 to \$1,000).⁶⁵

In response to concerns raised about various aspects of these changes by employers and temporary foreign workers alike, in December 2016 the federal government announced several immediate changes to the program, including committing to further developing pathways to permanence for foreign workers. Notwithstanding this and other changes, challenges in hiring temporary foreign workers persist, including application challenges such as costs, length of time for approvals, and perhaps most significantly, the lack of opportunities to follow a clearly delineated path towards permanency for temporary foreign workers.

More recently, in April 2020, the federal government announced \$50 million to help farmers, fish harvesters, and all food production and processing employers, put in place the measures necessary to follow the COVID-19 mandatory 14-day isolation period required of all workers arriving from abroad.⁶⁶

According to FPSC's survey of the industry, federal immigration programs like the TFWP were used by 16% of surveyed employers. Additionally, 11% of employers reported using provincial immigration programs like the Provincial Nominee Program. Nearly half (49%) of companies in Atlantic Canada reported using these two programs, which is significantly higher than in other regions of Canada. Relatedly, 45% of companies in seafood processing also reported using the TFWP or Provincial Nominee Program.

Employee Benefits and Other Incentives

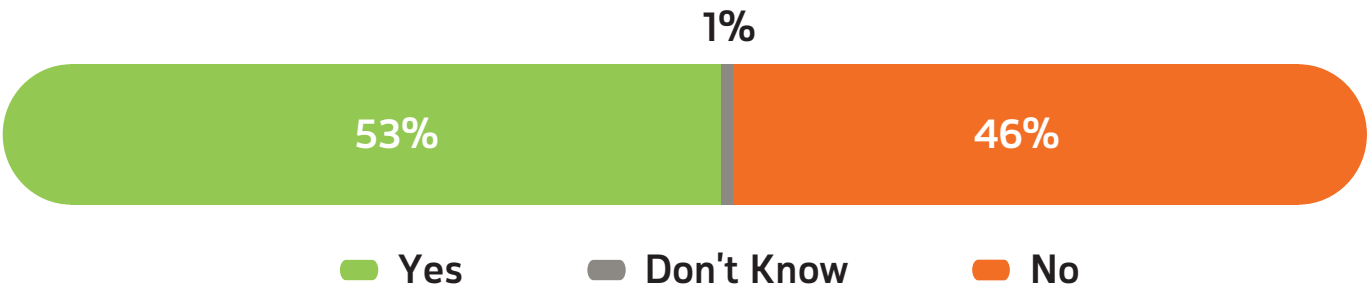
Benefits and incentives play an important role in attracting and retaining a productive workforce. While many employers use traditional incentives such as bonuses, others are also turning to less traditional incentives such as profit sharing, work-sharing, teleworking and awards.

Just over half of employers surveyed (56%) reported offering benefits. Nearly three-quarters (72%) of employers from the Prairie provinces offer benefits, as do 65% from Alberta. The range of responses by sub-sector is wide -- from a low of 39% in Sugar and Confectionery to as high as 80% in Grain & Oilseed Milling.

Nearly all employers (94%) that offer employee benefits reported providing extended health and drug plans. Paid vacation and leave (73%) is also frequently offered within benefit packages. Nearly half (45%) of employers reported offering RRSP matching, while about four-in-ten offer tuition reimbursement (38%) and pension plans (39%). Less traditional incentives, such as wellness programs, workplace perks and profit-sharing plans, are currently offered by a small proportion of surveyed employers.



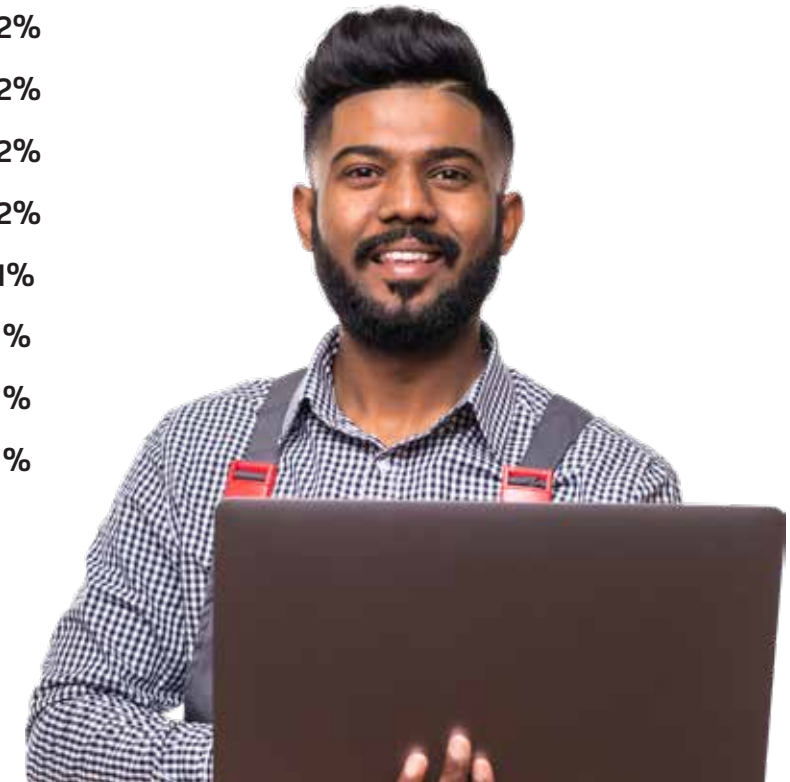
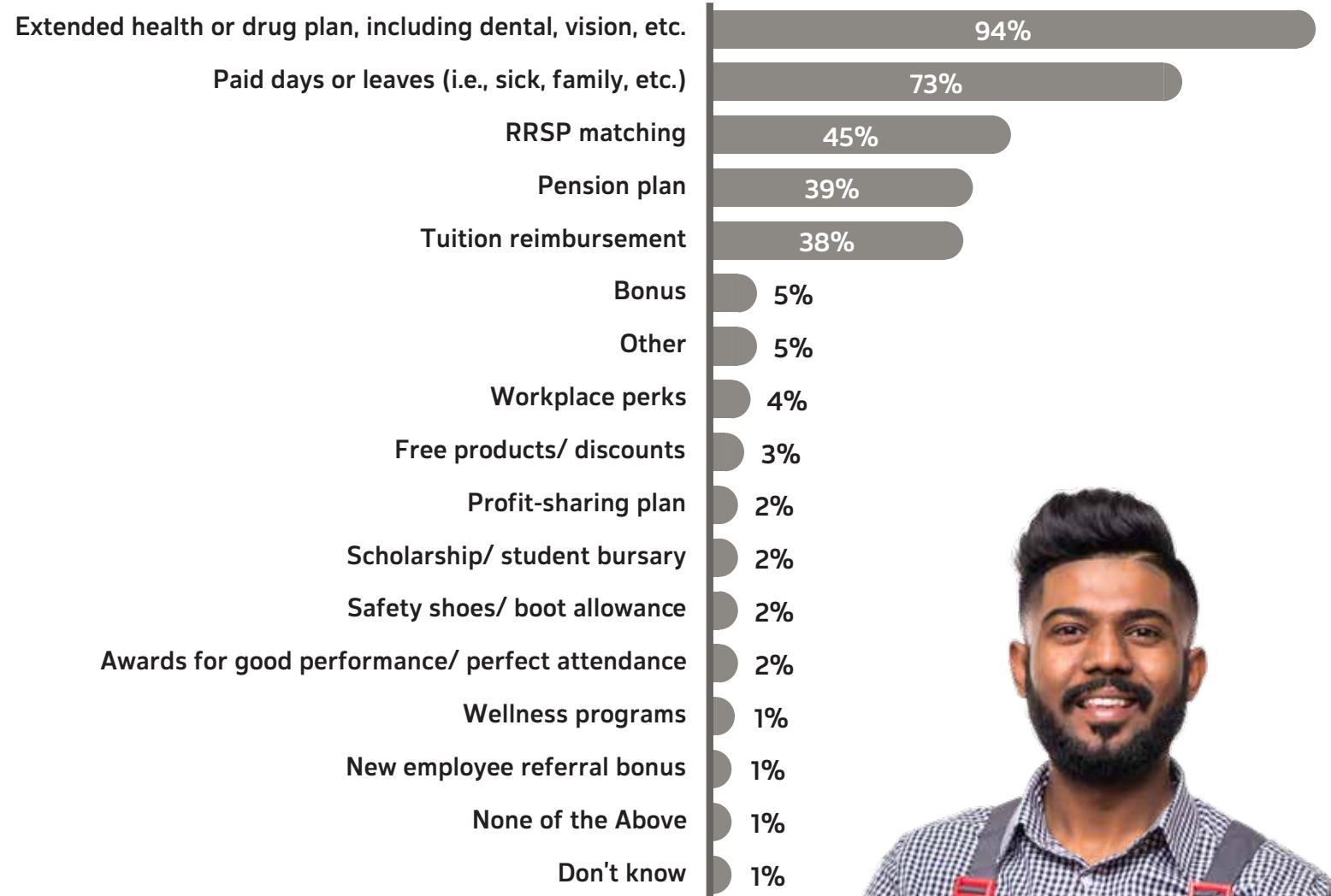
Are Benefits Offered at Your Plant or Organization? (n=740)



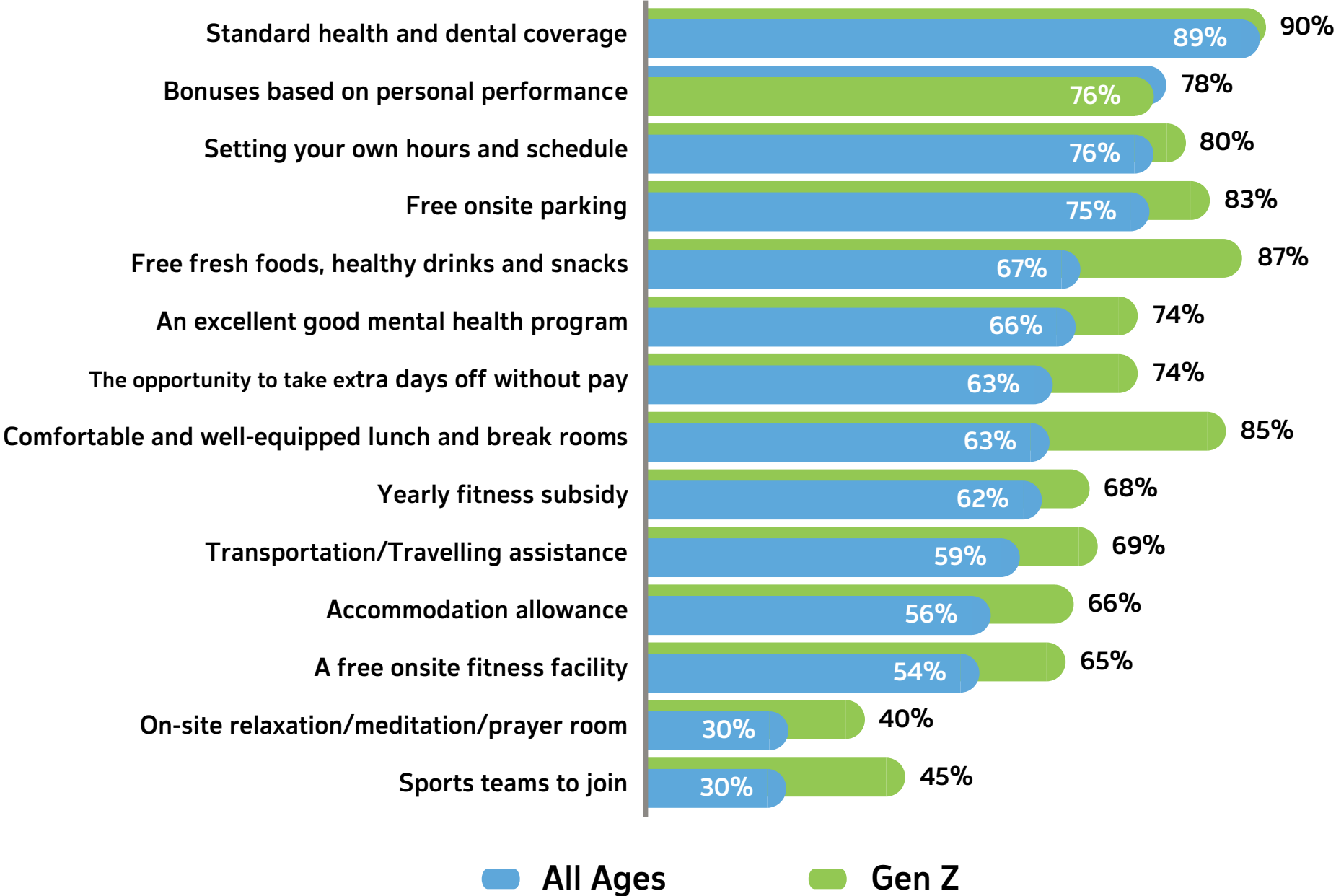
What Employment Benefits Are Offered at Your Plant/Organization?

While the literature often links employer emphasis on employee health and wellness to productivity gains, FPSC's survey of current and future labour market participants examined this issue through the lens of employee recruitment and retention. The core question measured the attractiveness of 14 options related to compensation, benefits, workplace health and wellness and workplace flexibility. Two findings are of note.

First, the analysis found that the four most appealing options to employees are traditional ones: standard health and dental coverage (appealing to 89%), personal performance bonuses (78%), the setting of one's own hours and schedule (76%) and free parking onsite (75%). And, the appeal of these options is consistent across generations.



Relative Appeal of Compensation, Work Flexibility and Health/Wellness Options (% Appealing)



Second, there are many significant differences in the appeal of options across the health and wellness category, including those aimed at promoting social solidarity. Essentially, the younger one is, the more appeal these options hold. The most striking results are found in the Generation Z (16 to 23 years of age) responses, whose top three choices are: standard health and dental coverage (appealing to 89%), free fresh foods, healthy drinks and snacks (87%), and comfortable and well-equipped lunch and break rooms (85%). These options are also significantly more appealing to women.

This segment is also much more likely to value a free onsite fitness facility (65% compared to an average labour market result of 54%) and sports teams to join (e.g., softball, bowling, volleyball, broomball at 45% compared to an average of 30%).

Young Millennials (24 to 30 years of age) also tend to place a higher value on the health and wellness and social options, but not to the same extent as their juniors.

FPSC's survey also included an experiment based on three randomly assigned postings for a labourer position in food and beverage manufacturing. The results suggest that the inclusion of either health and wellness options (e.g., availability of free healthy snacks and drinks) or work flexibility options (e.g., making one's own schedule) increases the appeal of the position. The same experiment conducted with a food science position showed no difference. The survey also revealed that the younger one is, the more appeal health and wellness options have, particularly with respect to the youngest cohort.

“ The most striking results are found in the Generation Z responses, whose top three choices are: standard health and dental coverage, free fresh foods, healthy drinks and snacks, and comfortable and well-equipped lunch and break rooms. ”



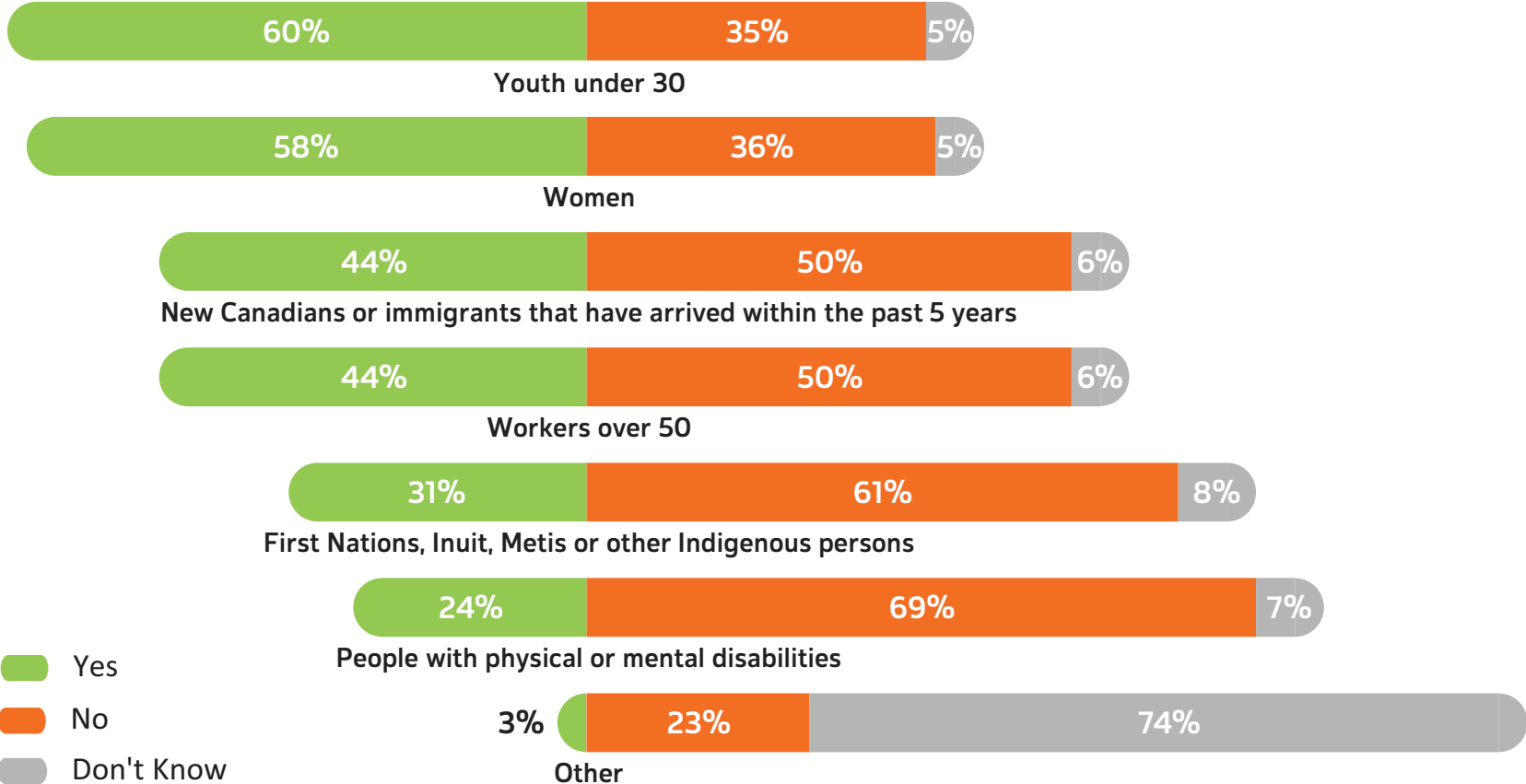
Recruiting Underrepresented Groups

Most employers reported making concerted recruitment efforts to attract young workers⁶⁷ (60%) and women (58%). Around 40% of employers said they made similar efforts to recruit immigrants and older workers⁶⁸. Employers are less likely, however, to try to recruit Indigenous Peoples (31%), and persons with disabilities (24%). Companies with dedicated HR staff were more likely to target underrepresented groups, especially immigrants (57%) and persons with a disability (30%).

Regionally, Quebec-based companies are more likely to focus their recruitment efforts on women (69%), older workers (64%) and persons with disabilities (37%).

Alberta is the only region that had less than half of respondents (48%) indicate they make efforts to recruit young workers. Sub-sector analysis reveals that more than three-quarters (77%) of seafood processors reported targeting youth under 30 years old, by far the highest proportion across the industry. This sub-sector is also more likely to try to recruit older workers (56%).

You Make a Concerted Effort to Recruit from any of the Following Groups? (n=740)



“ Women, regardless of age, tend to resemble Generation Z (16-23 years of age) in their job attitudes, perceptions and expectations. ”

Understanding the Five Generations in the Workforce

FPSC's survey examined career-related aspirations, expectations and preferences (e.g., learning, compensation) across five generations in the workplace. The research found a mix of commonality and divergence, with the latter particularly pronounced with respect to Generation Z (16 to 23 years of age), Young Millennials (24 to 30 years of age) and Boomers (56 years of age and older). Interestingly, the survey results also revealed that women, regardless of age, tend to resemble Generation Z in their attitudes, perceptions and expectations.

Workers want to be proud of where they work, and as part of that, want to understand key aspects of their workplace's "big picture" and context. Financial security and work-life balance are key goals for almost everyone. Workers of all ages want to continue to learn throughout their lives. Performance bonuses and health and dental coverage are attractive to everyone.

And, wages and benefits form only part of overall attraction. Everyone wishes to work for someone who is fair, open and transparent. One of the more striking findings in the study is that, when FPSC looked into aspects of "job hopping" (moving from employer to employer at rates many consider to be higher than in previous years) the study revealed that most workers, young and

old, would actually prefer to remain with an organization for as long as possible. So – the preference for remaining is there - looked at another way, the foundation for retention could be there too.

Older workers have more modest expectations about what they hope to derive from work and have higher levels of job satisfaction. They are more self-sufficient and flexible (e.g., more open to part-time work). They require less feedback and are fine with learning new things on their own. They value honesty above all. They strive for work-life balance but are not as attracted by corporate health and wellness policies and programs.

Youngest workers, labour market entrants and women look at the world of work through a wider lens and have higher expectations about what a job should provide them, beyond a pay cheque. They want to make friends, have fun at work and hope to have a supervisor who is friendly. Like older workers, they want to be proud of where they work and what they do, but they are also keen to see how their work, and the organization, contributes to the greater good. A sense of belonging is important to them. They want more feedback about how they are doing and need more structure. They are also very attracted to health and wellness policies and programs.

As Generation Z ages into Young Millennials, advancement becomes more important. They hope to see a path forward and are particularly keen to learn new things.

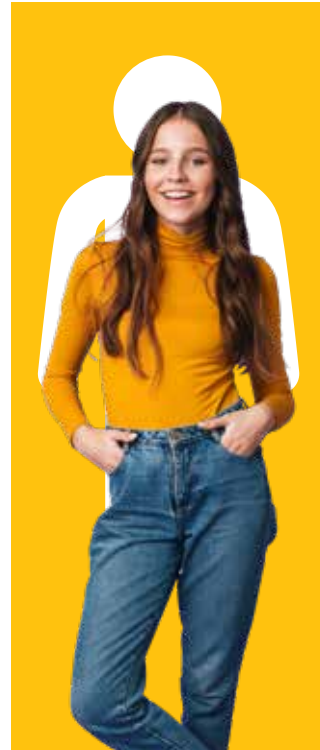


The Five Generations at a Glance



GENERATION Z
(16 – 23)

- Job security a priority
- Highly collaborative
- Workplace flexibility is very desirable



YOUNG MILLENNIALS
(24 – 30)

- Interested in leadership training
- Prefer texts & email over chat in person



OLDER MILLENNIALS
(31 – 39)

- Want to be judged for their results over hours
- Career development opportunities valued



GEN X
(40 – 55)

- Self-reliant
- Hardworking
- Prefer less supervision and greater autonomy



BOOMERS+
(56+)

- Job security is appealing
- Great source of industry knowledge
- Hardworking



“ Only 1 in 4 Canadians said they are familiar with the food and beverage processing industry and only 1 in 6 said they would apply for a job if it was located near them. ”

How Our Sector is Viewed: Addressing the Perceptions

One of the factors making it more difficult for our sector to find new workers is a relatively low awareness of the industry among everyday Canadians. A survey conducted in 2018 by FPSC found that only one in four Canadians was familiar with the food and beverage manufacturing sector while almost a third were not. The survey also found that only about one in six said they would apply for a job in the sector if it was located near them, and only one in nine would apply for a job specifically in the meat manufacturing or seafood preparation and packaging sub-sectors.⁶⁹

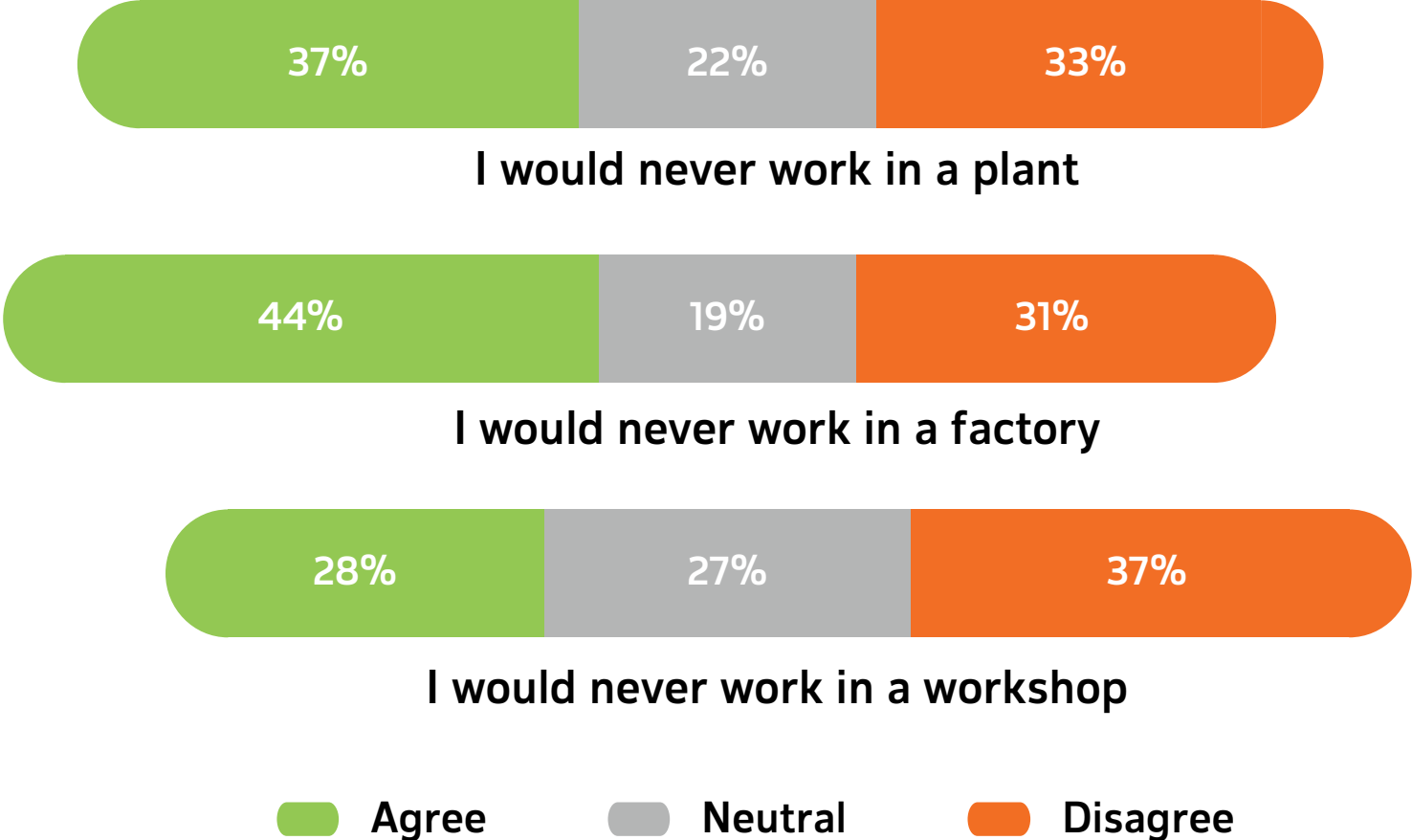
However, this study did offer some hope and guidance.⁷⁰ Analysis revealed that four population segments showed promise as sources of workers: Youth, those who are Tenuously Attached to the labour market, Recent Immigrants and Indigenous Peoples.⁷¹ Controlling for employment status, two segments in particular stood out as significantly more predisposed and open to working in the food and beverage processing industry than other Canadians - Recent Immigrants and Indigenous Peoples. An important finding in this study was that the impact of fact-based information about working in the sector (realistic portrayals of the actual nature of jobs available in these sub-sectors) also had the most positive net impact on these two groups, particularly Recent Immigrants.

Words Matter

FPSC's 2020 "Working Together – A Study of Generational Perspectives in Canada's Labour Force" study also looked at perceptions of terminology, based on an experiment whereby the survey sample was split into three random groups. Each group was assigned a different word: "factory", "plant" or "workshop". This experiment was aimed at helping employers more effectively engage with potential employees.

Overall, the least appealing word is "factory", followed by "plant", with the differences being significant. Close to half (44%) agree with the statement: "I would never work in a factory." The proportion agreeing falls to 37% when the statement contains the word "plant", and then to 28% when "workshop" is substituted.

Openness To Working in a Plant/Factory/Workshop (Overall)

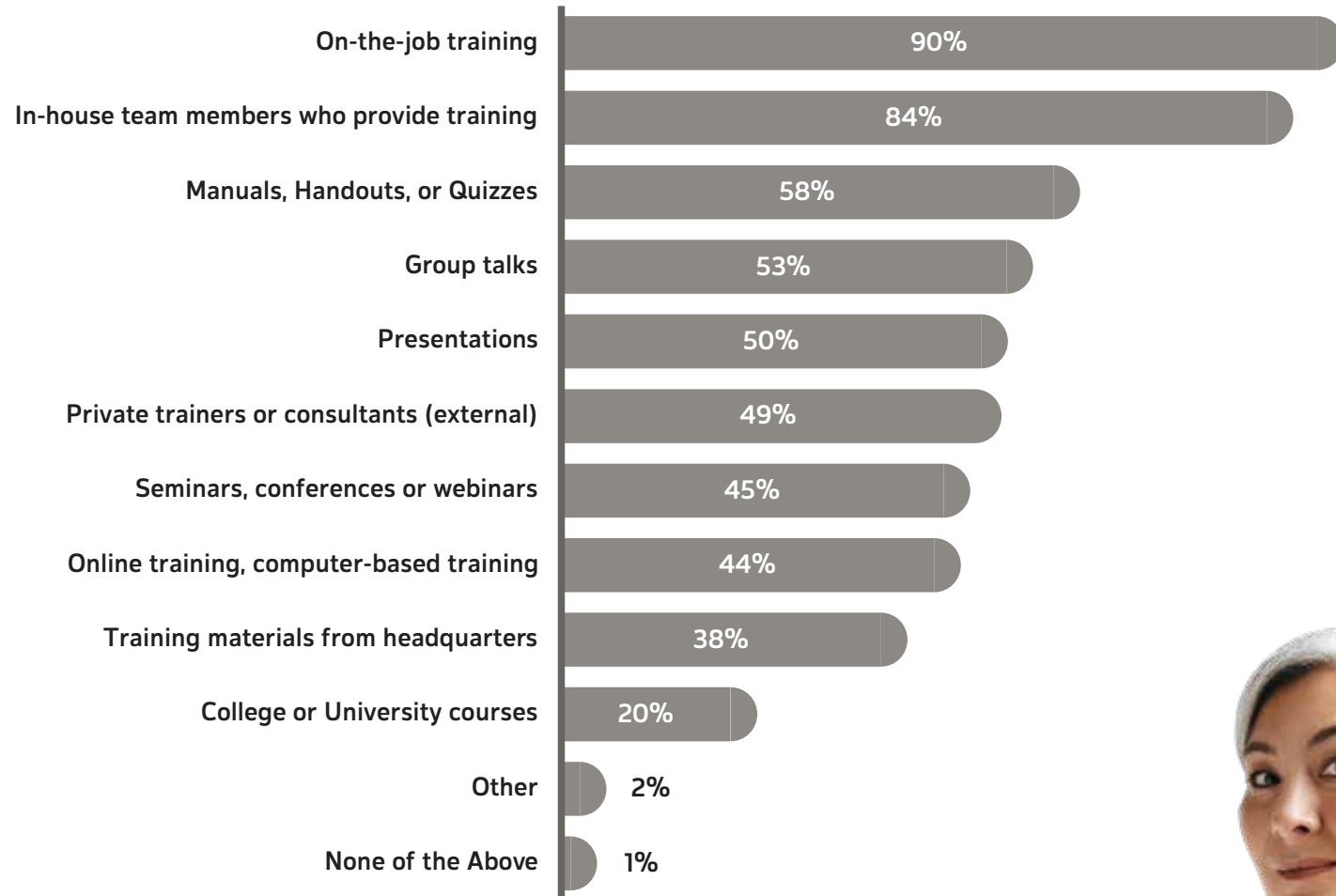


Types of Employer-Led Training

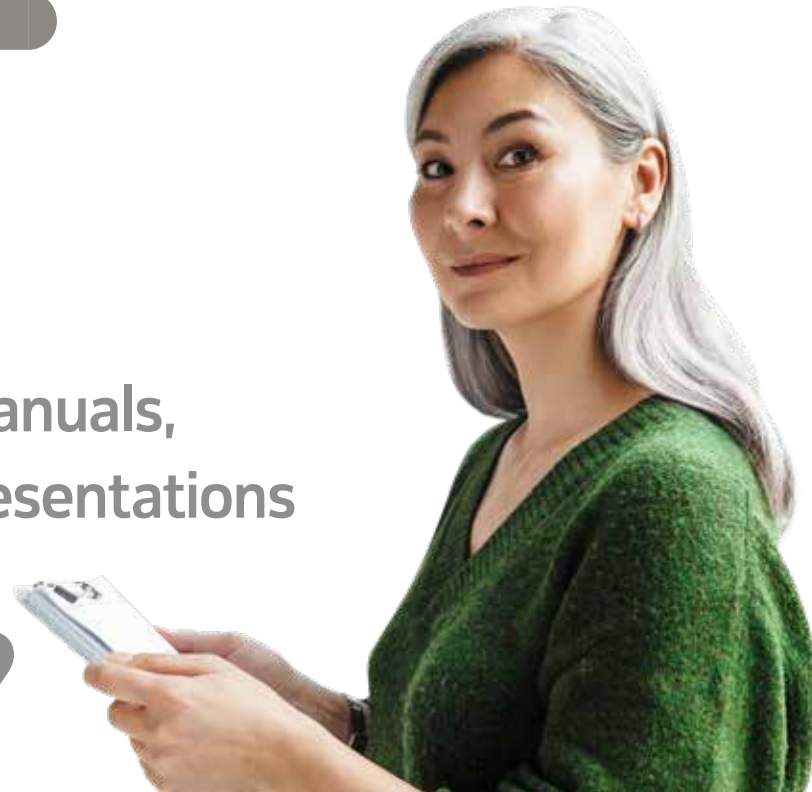
One approach to dealing with the lack of qualified job applicants is to provide more skills training to employees.

Food and beverage processors use a variety of methods to provide training to their employees. On-the-job training is used almost universally (90%), followed closely by in-house training by team members (84%). Low-cost training tools such as documentation (e.g. manuals, handouts and quizzes), group talks and presentations are also used by a majority of employers.

Training methods that are more costly, such as subsidizing college or university courses, are less commonly used. A statistic that stood out was that 68% of respondents did not know how much they spend on training annually. Unsurprisingly, companies with dedicated HR staff were more likely to report using each type of training tool except on-the-job training.



“ Low-cost training tools such as manuals, handouts, quizzes, group talks and presentations are used by a majority of employers. ”





“ On-the-job training is used almost universally by employers at 90%, followed closely by in-house training led by team members at 84%. ”

The research looked further into employee preferences for skills training. FPSC's survey of current and future labour market participants gathered feedback on a range of learning approaches, from classroom instruction to on-the-job training with a mentor.

Among formal learning options, 1) no approach is widely preferred, and 2) the two most popular ones are quite different from each other. A small plurality (34%) prefer to learn in a classroom setting onsite. The second most popular approach is online learning with no instructor (26%).

It is reasonable to hypothesize that younger workers would prefer self-guided online learning, while older ones would opt for a classroom setting. In fact, the opposite is true. Generation Z is much more likely than any other segment to prefer learning onsite in a classroom (i.e., 50% select this approach compared to only 17% who would rather learn on their own, online). Boomers, in contrast, are more likely to prefer self-guided online learning to an onsite classroom setting (30% and 26% respectively).

It may be that since many Generation Z are either full-time or part-time students or recent graduates, learning in a classroom with an instructor or teacher is what they are most recently familiar with, and as a result more comfortable with. It should be noted that the impact of COVID-19 and more remote learning for secondary students and post-secondary students may change this over time.

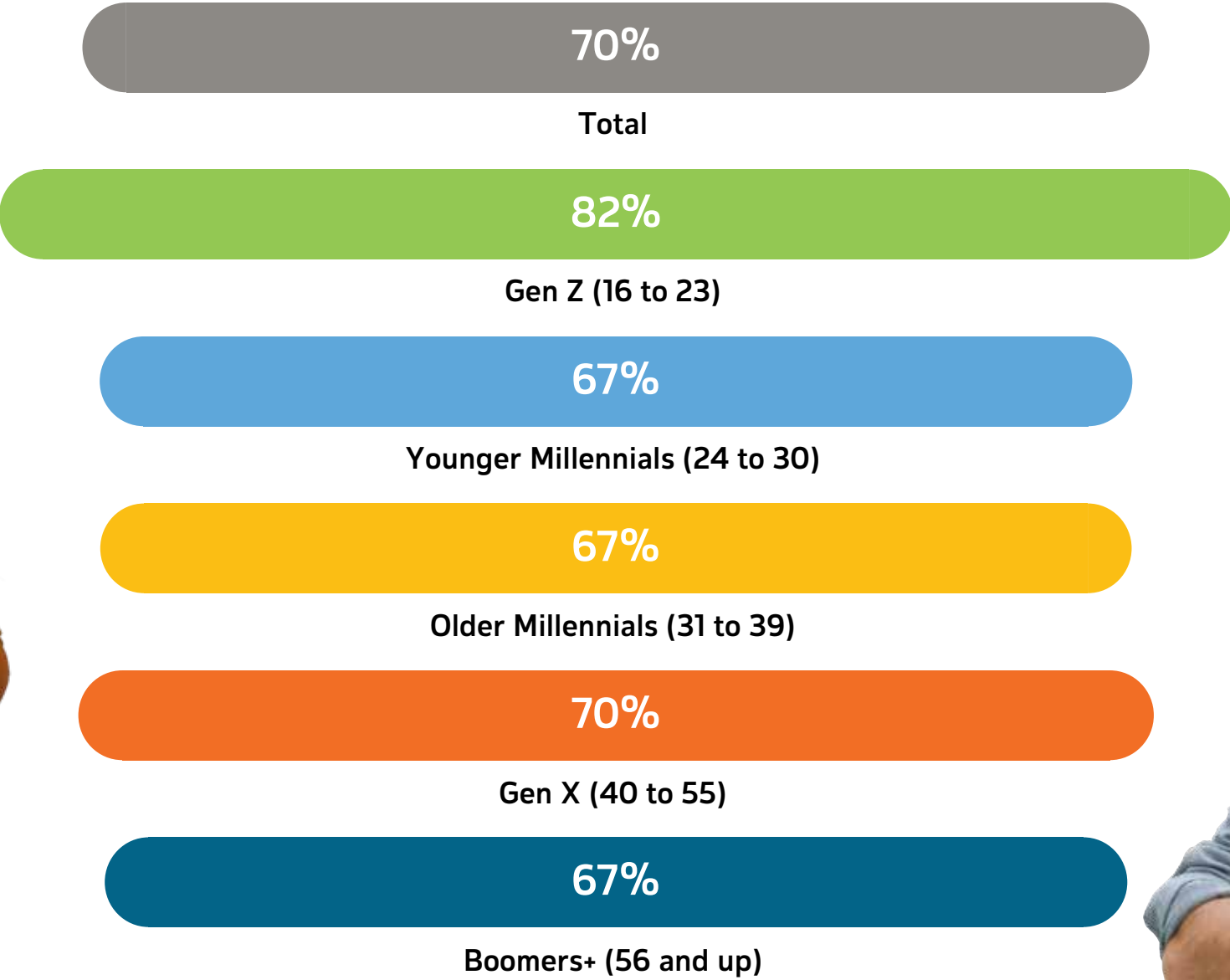
The study also examined learning and career development from a different angle, by asking respondents to rate the appeal of mentoring, cross-training, having a career development plan and learning new technology. The results show that all of these have significant appeal across generations.

The two most appealing, however, are the opportunity to learn different jobs within the organization (appealing to 70%) and the opportunity to work with new technology (69%). It is interesting to note that the latter holds as much appeal to older workers as it does to younger ones. The opportunity to learn different jobs, however, is significantly more appealing to Generation Z (82%). The opportunity to mentor and coach others is appealing to 57% of the labour market, with no variation by age.

“ The opportunity to learn different jobs is significantly more appealing to Generation Z. ”



"The opportunity to try different jobs within the organization" (% Appealing)



Q: First, for you personally, how important are each of the following career goals? Base: All Respondents, n=1,500

Section 9

Leveraging Canada's Leadership in Education

The vast diversity of industry occupations is reflected in Canada's educational landscape. Training opportunities range from workshops and courses to college and university programs. Approximately 490 industry relevant programs of study are offered by 160 institutions.

Additionally, 99% of companies surveyed use at least some form of training in the workplace, although only 1/3 have a defined annual training budget.

A deficit in training options has been identified for industry production workers, and a disconnect is apparent between the training programs available for the industry and the level of employer awareness of those programs. Almost half of companies surveyed rate the educational programming designed to produce graduates for the sector as being inadequate or non-existent.

There is opportunity to better align Canada's leadership in education with the needs of the industry through the industry's competency-based Learning and Recognition Framework and accreditation program.



490 food and beverage programs offered across Canada.

“ Training options for the industry range from workshops and courses to college and university programs. ”

Only **42** programs offered in Atlantic Canada

The largest program enrollment is in Culinary Arts at **27%**

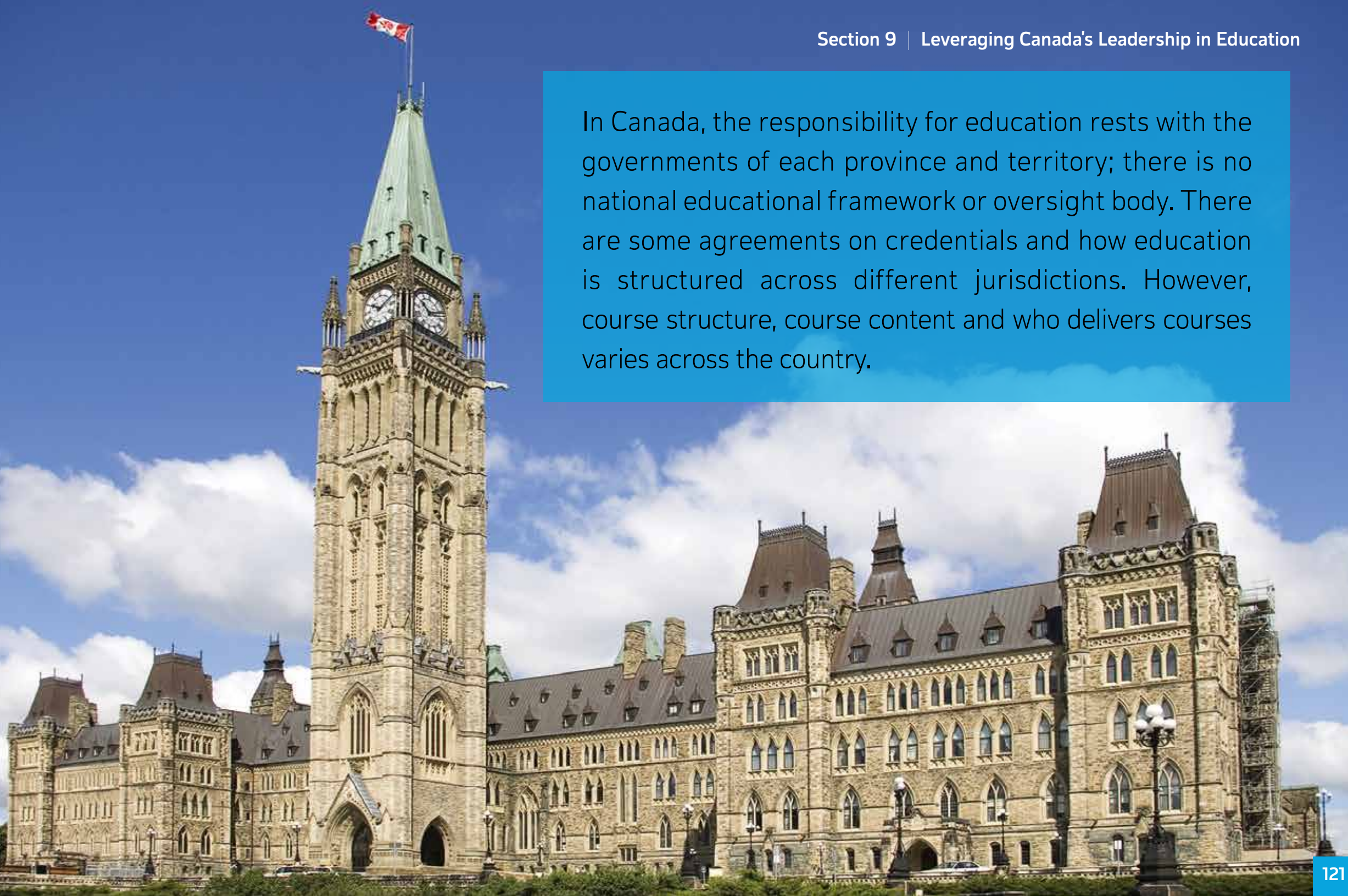
The Educational Landscape

There are several types of training options available to industry employers and people interested in working in food and beverage manufacturing through colleges, universities, private trainers and associations. The research indicates that in some regions training options are sufficient to meet industry needs, and in others there are gaps. Similarly, there is adequate training available in specific areas of study relevant to the industry, and deficits in others.

In the fall of 2019, there were 490 industry-relevant programs of study provided by 160 institutions, offering the opportunity for a mix of theoretical instruction and practical application.

In 2015, there were approximately 5,900 people enrolled in such programs, with over 1,200 graduates. An additional 7,400 students were enrolled in food service apprenticeship programs in 2015.

In Canada, the responsibility for education rests with the governments of each province and territory; there is no national educational framework or oversight body. There are some agreements on credentials and how education is structured across different jurisdictions. However, course structure, course content and who delivers courses varies across the country.





Certificate Programs

There are three types of certificate programs with the following admissions requirements:

1. Foundational programs that do not require any previous credential other than a secondary school diploma and English competency.
2. Post Graduate programs that require a previous post-secondary diploma or degree as admission requirement and may also require work experience.
3. Professional development programs that may or may not require a credential, but will require significant work experience.

Most certificate programs are 1 year or less to complete and a few are delivered online. Foundational programs are valuable to individuals that are seeking a quick access to entry level employment. Overall, certificate programs tend to be industry-focused introducing food science theory, but within the context of its application in the work setting.

Diploma Program

Diploma programs are generally two years in length with a focus on entry for students into the workforce. These programs are geared for individuals who are ready to make a commitment to a career path in the industry. Often diploma programs lay the foundation for additional schooling to upgrade from a diploma to a degree.

Diploma programs generally require a secondary school diploma with specific requirements for credits in chemistry, math and English.

There are two types of diploma program with the following admission requirements.

- Foundational programs that typically require a high school diploma and may require specific subjects.
- Post Graduate programs that require a previous credential such as a degree program and may require work experience.



Apprenticeship Programs

Of the available trades across the country, the two traditional trades of Baker and Meat Cutter are the only trades that are listed in each province and territory that are related to food production. Typically, the off-the-job training programs for these two trades are for those in the trade that are "customer-facing" work, such as in retail work situations.

Although individuals who complete apprenticeships could work in industrial settings, the training programs are not designed for the work considerations or environments in industrial food and beverage processing facilities. It also appears that although these trades are listed, they may not have all the components for apprenticeship in place. For example, Baker is listed as a Red Seal Trade in every jurisdiction but does not appear to be

available in all jurisdictions as there are gaps in the availability of off-job training programs to support apprenticeship. In Saskatchewan, there is no off-the-job training available for Meat Cutter Apprenticeship, but the Saskatchewan trades governing body will accept training from Twin Rivers University in British Columbia.




In Ontario, there is a trade and an apprenticeship program for Process Operator – Food Processing. This apprenticeship program is designed for individuals who want to work as Process Operators in food and beverage processing operations. The off-the-job training provides a grounding in food safety as well as the application of instrumentation and mechanical systems in food and beverage processing.

Degree Programs

There are many post-secondary degree programs in food science and technology in Canada. Each province and territory is responsible for advanced education and there is limited agreement for recognition of credentials as the course work supporting them is so variable. Food Science is affiliated with programs that are health oriented e.g., Food Science and Nutrition, or more applied e.g., Food Science and Technology and Culinary. More recently, there is a shift to more responsive programming for industry in areas of food safety and food processing. Engineering programs in food engineering and bioprocess engineering are also becoming more common.

The post-secondary programs and courses relevant to the food and beverage processing industry can be categorized into nine areas of study, described in the following table.

Classification of areas of study relevant to the food and beverage processing industry

| <h3>Baking and Pastry Arts</h3>  | <h3>Beverage Processing</h3>  | <h3>Cannabis</h3>  |
|---|--|--|
| <p>These programs include instruction in baking both as it relates to bread, pastries, and cakes. Some programs combine an introduction to all elements of baking and pastries, such as professional baking and pastry arts, while other programs focus on skills in one designation such as bread making or cake decorating.</p> | <p>Beverage processing programs combine instruction in a variety of areas, including brewing, wine, and other beverages such as teas and ciders. Topics of study can include introductory or advanced training in the technology, operation and management of beverage processing facilities.</p> <ul style="list-style-type: none"> • Brewing: Participants receive specialized training in the technology, operations, and management of beer and breweries. This category largely includes brewmaster or brewery operation programs. • Wine: Wine processing programs can include instruction in the operations, maintenance, and management of wine and wineries. These programs can range from sales and marketing to wine technology programs, yet it is important to note that most viticulture programs are not included here as they focus on the horticultural aspects of grape growing and harvesting rather than processing operations. • Other: Other options in beverage processing include the introductory and advanced instruction in teas, cider-making, and artisan-style distilling techniques. These may be offered as continuing education courses or advanced certificate programs. | <p>Although very few programs are available regarding edibles using cannabis, it is currently possible to pursue programs related to Cannabis cultivation and production, quality assurance, and the chemical and microbiological components of cannabis in crop science. As an emerging industry, there is also a strong emphasis on legislation and regulation in the programs offered. These programs can serve as a basis for those interested in developing edible products using Cannabis.</p> |

Classification of areas of study relevant to the food and beverage processing industry

Culinary Arts



Training in culinary arts is quite diverse and includes both foundational and specialized instruction programs. While this category captures many programs, sub-categories help organize and highlight the unique considerations within each grouping.

- **Chocolate:** Programs here include specialized advanced training in chocolate and confectionery arts.
- **Cook:** This training prepares students for work in restaurant kitchens, large catering establishments, or health care institutions. Instruction includes the techniques required in food preparation and presentation and practical lessons in food storage and sanitation.
- **Culinary arts and culinary skills:** These programs include comprehensive training, from basic kitchen skills and food preparation to advanced techniques in butchery and international cuisine, for example.
- **Culinary management:** Culinary management programs combine culinary-based instruction with an additional management component. Programs largely include a range of courses from food preparation and cooking techniques to food business marketing, menu planning, cost control, and other management practices. Program courses may also include human resources, accounting and finance, and risk management topics associated with culinary management. This component prepares students for management in a restaurant or hotel setting, a large catering event, or their own entrepreneurial venture.
- **Other:** Beyond training as a cook or chef, there are specialized programs that deliver training in a specific food or technique such as Asian or vegetarian culinary arts, for example.




Food and Beverage Services



Food and beverage services can include introductory training as a member of a food service team in a commercial, industrial, or long-term care facility or advanced training in food and beverage management. Despite program names that reference hotel or restaurant management, programs in this category are selected based on their training components in food preparation and cooking. These programs may be applied as introduction training towards a prep cook or professional cook.

- **Nutrition:** There are also programs within food and beverage services with a strong emphasis on nutrition and management. These programs combine cooking and food service with instruction in nutrition and quality management techniques, preparing students for managing the complex functions of a food services department.

Classification of areas of study relevant to the food and beverage processing industry

| <h3>Food Processing Operations</h3>  | <h3>Beverage Processing</h3>  | <h3>Food Safety/Food Quality</h3>  |
|---|--|---|
| <p>These programs train students in the practical operations of food processing including processing methods (e.g., filling and packaging), equipment adjustment and sanitation, occupational health and safety, and management practices for food processing. This training is targeted to those either looking to upgrade their skills for management or supervisory positions or those interested in beginning work in food and beverage processing lines.</p> | <p>With such a broad range of programs available in nutrition, it is important to make the distinction between those programs that emphasize elements of food science. While other food science programs may focus on the chemical makeup of food, these programs combine instruction in the nutritional aspects of food and metabolism in addition to the study of food science. Food science and nutrition programs can consider the foundation of nutrition in food product development, consumption, and metabolism; the application of nutrition toward policy and legislation; and the scientific properties of food.</p> <ul style="list-style-type: none"> • Nutrition: These programs include the study and analysis of applied nutrition, human biology, and the effects of nutrition on health. Specializations and course options from these programs can vary but include opportunities for food research and development, the relationship between dietary intake and the body, and practical culinary techniques focusing on nutrition. | <p>Food safety and Food Quality programs and courses offer opportunities for introductory food safety training in processing operations and advanced study in food quality assurance and quality control. These prepare students for the workplace or continuing studies in food safety and food quality and may range from short courses to advanced graduate degrees.</p> |

Classification of areas of study relevant to the food and beverage processing industry

Food Science and Technology



Food science programs are often multi-disciplinary and combine diverse areas of study that address the transformation of raw ingredients into food products. Instruction often includes the physical and chemical properties of food, elements of food product development and food processing, and preservation and packaging. These programs can combine the natural sciences, nutrition, and principles of engineering to understand the physical and chemical processes involved in new food product development and analysis.

- **Bioresource sciences:** These programs use the study of the natural sciences, including molecular biology, biochemistry, and cell biology, to help understand and analyze a variety of areas, including agriculture, health, and the environment. Instruction can combine theory and practical laboratory experience to understand issues surrounding food testing and overall food safety and quality, for instance. While food science and technology programs study food development and analysis, bioresource sciences explore both the chemical composition and the social implications surrounding issues such as food shortages, crop engineering, and environmental sustainability.

Management - Food and Agribusiness



Management in Food and Agribusiness targets emerging issues in food, agriculture, and resource management. These programs provide students with the practical business and analytical tools to understand and work through these issues and the science and business skills needed in the food industry, often including instruction in the business and economics of food, agriculture, and production and processing. This training prepares students for a wide variety of fields such as food product management, supply chain management, government policy, international trade, food safety, and regional development.

Classification of areas of study relevant to the food and beverage processing industry

Food Science and Technology



Processing programs include meat, seafood, and dairy processing and offer practical training for work in processing operations. Programs can include both introductory short courses and advanced specialized certifications, including meat cutting and butchery programs, seafood processing workshops, and cheese-making technology. While all programs provide instruction in processing techniques, they are organized by several food categories to acknowledge the distinct processing methods required in each category.

- Dairy: Dairy processing programs include the techniques and instruction needed to produce cheese and ice cream. Programs may offer introductory study or comprehensive, advanced training.
- Meat: Butchery and other meat-cutting programs and processing are included in this category. Programs may offer basic skills training in cutting techniques or may explore advanced butchery processes.
- Aquaculture: These programs explore the technology, management, and operations of aquaculture, which often include the study of fish and shellfish production and monitoring, business communication skills, and the processing, grading, and transportation of aquaculture products.

Other Food Studies



This category captures those programs that approach the study of food through different approaches: some programs focus on food issues on a regional, national, and international scale whereas other programs incorporate elements of media communications and hospitality into the study and presentation of food products.

- Food Studies: These programs help prepare students with the critical thinking and analytical skills required for work in food-related positions such as food processing management, agri-food data analytics, or resource management consulting.
- Food Media: Programs in food media are included in this category as they combine elements of business and marketing in the study of food product creation, development, and presentation.
- Food Tourism: This category includes programs covering tourism marketing and development within food culture and community traditions.

And as shown in the following table, approximately one-quarter of the programs are related to Culinary Arts (27% of programs), which includes both programs regarding culinary skills and culinary management, as well as apprenticeship programs (e.g., Professional Cooks). The second largest category is Food Science & Technology (17% of programs), including several university-level programs and several specializations related to bio-resources, bio-processing and food innovation across the country.

In third and fourth position, Baking & Pastry programs (11%) and Food Science and Nutrition (13%) are noted. The relative number of Baking & Pastry programs is directly influenced by the numerous apprenticeship programs available to train bakers. The number of programs related to Food Science & Nutrition is influenced by the numerous programs related to nutrition proper. Although the relationship with the food processing industry is somewhat indirect, nutritionist and dietitians are trained in areas of importance to this sector.

In contrast, there are very few programs pertaining directly to production, where labour shortages are greatest: 7% Processing, 2% Food Processing Operations and 2% Food Safety/Quality.

Number of programs by area of study



A regional and provincial analysis allows for a more detailed picture of learning program gaps: programs are largely concentrated in Central and Western Canada and there are relatively few programs available in Atlantic Canada. Quebec has 58 programs, but this number is small relative to its population and other large provinces (i.e., Ontario, BC and Alberta). Perhaps most striking is there are only

two provinces that offer at least one course in Food Processing Operations. The situation is almost as limited with respect to Food Safety and Quality.

“ There are very few programs pertaining directly to production, where labour shortages are greatest. ”

Number of programs by province and territory

| Area of Study | BC | AB | SK | MB | ON | QC | NS | NB | PE | NFL | NU | YU | Total |
|----------------------------|------------|------------|-----------|-----------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|
| Baking/Pastry | 13 | 8 | | 2 | 24 | 3 | 1 | 1 | 2 | | | | 54 |
| Beverage Processing | 6 | 1 | | | 15 | 1 | 1 | | | | | | 24 |
| Cannabis | | | | | 11 | 1 | 1 | | | 1 | | | 14 |
| Culinary Arts | 34 | 11 | 5 | 11 | 58 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 132 |
| Food & Beverage Services | 6 | | 4 | 2 | 24 | 2 | | | | | | | 38 |
| Food Science & Technology | 3 | 8 | 7 | 9 | 23 | 24 | 6 | | 2 | | | | 82 |
| Food Processing Operations | 1 | | | | 7 | 0 | | | | | | | 8 |
| Food Safety/Quality | 1 | | | 1 | 4 | 2 | | | 2 | 1 | | | 11 |
| Food Science & Nutrition | 7 | 9 | 5 | 3 | 13 | 19 | 6 | 1 | | 3 | | | 66 |
| Management | 1 | 8 | | | 4 | 1 | 1 | | | | | | 15 |
| Processing | 8 | 3 | 1 | | 10 | 1 | 4 | | 7 | | | | 34 |
| Other Food Studies | 5 | | | | 5 | 1 | | | 1 | | | | 12 |
| Grand Total | 85 | 48 | 22 | 28 | 198 | 56 | 22 | 4 | 16 | 9 | 1 | 1 | 490 |
| Distribution | 17% | 10% | 4% | 6% | 40% | 11% | 4% | 1% | 3% | 2% | 0% | 0% | 100% |

Mapping Current Programs & Training Options

Research shows that there is a range of programs offered by universities across Canada, with Food Science & Nutrition being the most prominent.

Number of programs offered by universities by area of study

| Area of Study | Undergraduate program | Graduate program | Other* | Total |
|----------------------------|-----------------------|------------------|----------|------------|
| Baking/Pastry | 1 | | | 1 |
| Beverage Processing | 4 | 1 | | 5 |
| Cannabis | 1 | | | 1 |
| Culinary Arts | 4 | | 3 | 7 |
| Food & Beverage Services | | 1 | | 1 |
| Food Science & Technology | 20 | 40 | | 61 |
| Food Processing Operations | 1 | | | 1 |
| Food Safety/Quality | | 3 | | 3 |
| Food Science & Nutrition | 28 | 28 | | 56 |
| Management | 7 | 1 | | 8 |
| Processing | 3 | 3 | 4 | 10 |
| Other Food Studies | 5 | 3 | 1 | 9 |
| Grand Total | 74 | 80 | 9 | 163 |

Programs offered by colleges, institutes and private training organizations are also increasing in response to the shifting skills requirements of the industry. Students in these programs gain valuable hands-on experience in industry processes and practices and can go on to further studies in post-graduate certificate programs aimed to develop and specialize their skillset.

The vast majority of programs offered by colleges, institutes and private institutions (excluding CFPs and Cégep) are in the area of Baking & Pastry (16% of programs) and in the Culinary Arts (40%).

Number of programs offered by colleges, institutes and private training institutions by area of study

| Area of Study | Undergraduate program | Graduate program | Prof. or Technical | Cont. Education | Total |
|----------------------------|-----------------------|------------------|--------------------|-----------------|------------|
| Baking/Pastry | 25 | 2 | 17 | 6 | 50 |
| Beverage Processing | 6 | 2 | 3 | 8 | 19 |
| Cannabis | 5 | 5 | 3 | | 13 |
| Culinary Arts | 78 | 4 | 34 | 8 | 124 |
| Food & Beverage Services | 14 | 4 | 10 | 7 | 35 |
| Food Processing Operations | 2 | 1 | 1 | 3 | 7 |
| Food Safety/Quality | 3 | 4 | 0 | | 7 |
| Food Science & Nutrition | 6 | | 1 | 1 | 8 |
| Food Science & Technology | 17 | | 1 | | 18 |
| Management | 5 | 1 | 0 | 1 | 7 |
| Other Food Studies | | 2 | 0 | 1 | 3 |
| Processing | 10 | 3 | 9 | 1 | 23 |
| Grand Total | 171 | 28 | 79 | 36 | 314 |

Area of Study

| | Province/Territory | Number of Programs |
|----------------------------|----------------------|--------------------|
| Baking/Pastry | British Columbia | 6 |
| | Alberta | 3 |
| | Ontario | 2 |
| | Nova Scotia | 1 |
| | Prince Edward Island | 1 |
| | Newfoundland | 2 |
| Cook | British Columbia | 17 |
| | Alberta | 5 |
| | Ontario | 3 |
| | Nova Scotia | 9 |
| | Prince Edward Island | 11 |
| | Newfoundland | 2 |
| | New Brunswick | 1 |
| | Yukon | 1 |
| Culinary Management | British Columbia | 17 |
| | Alberta | 5 |
| Culinary Arts/Skills | British Columbia | 6 |
| | Alberta | 3 |
| | Ontario | 2 |
| | Nova Scotia | 1 |
| | Prince Edward Island | 1 |
| Food & Beverage Services | British Columbia | 1 |
| | Saskatchewan | 1 |
| Food Processing Operations | Ontario | 1 |
| Meat Processing | British Columbia | 1 |
| | Ontario | 1 |

**Total
Number of
Programs
78**

For those looking to improve their skills or learn from an industry mentor on-the-job, an apprenticeship training option provides a high level of skills training and development. Offered in 45 institutions across the country (excluding Quebec, where the vocational/technical training approach is used). These programs help supply skilled workers to fill much-needed high skill level positions.

Most programs prepare for a career as a Professional Cook or a Baker, and provide different levels of training, from pre-employment introductory programs to 3-year programs allowing to apply to a Red Seal certification or Certified Journeyman recognition. An overview of the 78 programs that were identified is presented in this table.



A variety of work-integrated learning options such as co-op terms are available to post-secondary school students seeking experience with an industry or employer. Industry also offers training programs to recent graduates to immerse them in practical learning. Individual courses, both online or onsite, are also offered by industry associations and other relevant groups. Course in food safety and food quality were represented the most followed by workforce health and safety, and production and processing.

The research has indicated that training opportunities requiring different commitment levels are available. Fields of study also range from practical training related to food and beverage processing operations, to programs that cover food preparation such as baking and culinary arts, to graduate studies on the chemistry of foods such as nutrition and food science.

A consistent theme that is emerging across the educational landscape is the importance of experiential learning and workplace integration learning programs. By connecting students equipped with new skills to employers with skills gaps, there is an opportunity to facilitate professional relationships that may continue beyond graduation. Work terms also assist students in exploring career pathways and the workplace culture within the industry. Student engagement with employers is a key strategy in talent attraction for the industry.

Aligning Skills Training with a Recognition Framework

A **recognition framework is a documented model** that clearly defines each and every qualification (e.g., certificate) included within a comprehensive structure. It may also provide a hierarchy of recognition and qualifications.

When applied by governments nationally, it is an all-encompassing framework meant to integrate the qualifications issued by different academic bodies into a common structure. It consists of a set of common reference points, referring to competencies or learning outcomes, supported by a range of tools and techniques, regardless of how the skills and knowledge were acquired.

While no national governmentally-administered qualifications exist for the food and beverage processing industry in Canada, FPSC previously identified a need to clearly articulate the potential recognition levels related to the industry's Competency Framework.



To guide design of a Learning Recognition Framework for the industry, FPSC assessed qualification frameworks found internationally, in addition to public and private training programs in North America.



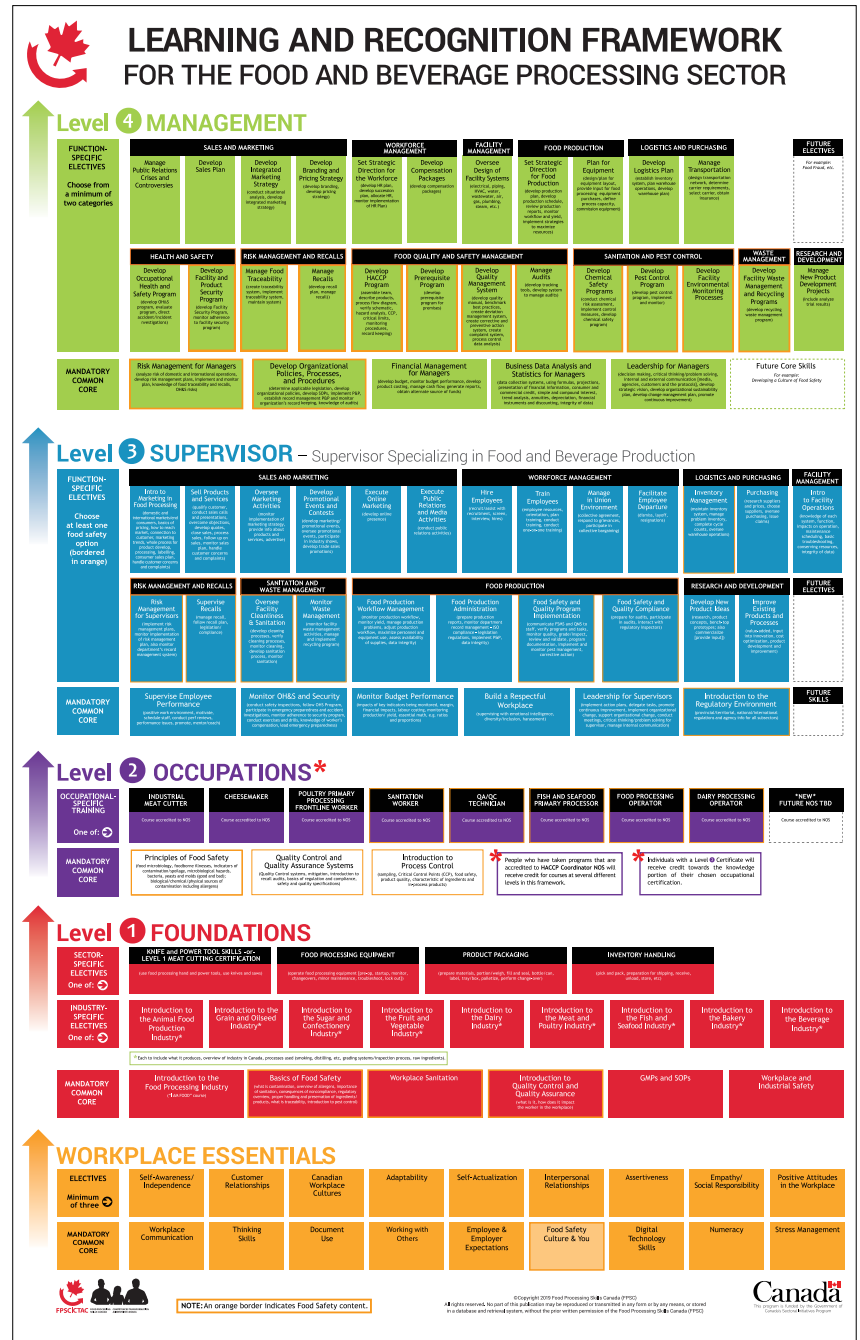
International Training Frameworks

In many countries outside of North America, the responsibility for education rests with the national government. For these nations, most have some kind of national qualification framework or scheme that guides all public and private training programs in all sectors within that country. The frameworks are known by different titles, such as National Vocational Qualifications, Qualification and Credit Frame, Training Regulations, or the European Qualifications Framework. These frameworks are administered by a national body associated with the sector, such as the National Food Industry Training Council in Australia and the Food and Beverage Sector Education and Training Authority in South Africa.

Features of International Frameworks

By comparing and contrasting the international frameworks, the following observations can be made:

- International frameworks typically feature a number of levels (usually 2 to 6) that increased in their complexity. That is, the lower levels are typically for those with little or no work experience, working up to the higher levels that demand specialized skills
- Supervisory and management-related competencies are typically expected at the mid-higher levels of the frameworks.
- While it varies, there are usually more courses or credits required at higher levels.
- Frameworks can be completely mandatory, requiring students to require a set number of courses or units; or can involve some flexibility by offering a choice of options. Most international frameworks are a blend of mandatory courses supplemented by a set number of options which facilitates students in customizing programs to their own professional needs.
- Many frameworks acknowledge the specific needs of particular industries (dairy, wine, etc.), but also try to remain relatively broad-based.
- Some frameworks integrate apprenticeship credentials into their models. Where these appear, they are typically at levels addressing specialized technical skills.



Evaluating the international landscape of recognition frameworks provided guidance to FPSC and the industry. In 2020, the organization finalized the food and beverage manufacturing sector's Learning and Recognition Framework (LRF) following consultations and validation with industry.

The LRF lays out a learning path for those working in, or transferring into, the food and beverage processing sector. While it is not a career path per se, it does provide an overview of skills needed as an individual progresses through his or her career.

The LRF is not tied to typical levels such as certification, diploma and degree programs, but organizes the nationally-validated food industry competencies into a logical structure with a training focus. **The LRF is also** the basis of FPSC's accreditation program that institutions, private trainers and employers will access to have their programs vetted against national competency standards and the associated recognition level. If programs meet the requirements, the training agency will be able to issue nationally-recognized credentials to graduates of the program.

This may require institutions to update or realign their courses with the LRF.

An accreditation program has several benefits. An educational institution, private trainer or employer will be able to market their program(s) as being nationally-recognized and can offer their graduates a nationally-recognized credential upon completion of their program. Graduates will possess a credential that will be recognized across the country, increasing mobility, and providing clear learning paths for their careers in the food and beverage processing sector.

Foreign credential recognition may also be supported. By comparing an individual's existing qualifications (e.g., credentials, diplomas) and their competencies/learning outcomes to the LRF, individuals with

foreign credentials may be able to have their skills benchmarked, or even acquire a Canadian credential, through a prior learning recognition process or by taking an accredited Canadian program.

The LRF is already proving a valuable learning tool for individuals working in, or transferring into, the food and beverage manufacturing. With standardizing training, individuals have clarity on a career pathway, the skills required and the expectations at each level. The same clarity drives improved communication between employers and employees, and ultimately workforce performance.

| | |
|--|--|
| <p>Level 4: Management</p> | <ul style="list-style-type: none"> • For those currently holding, or transitioning to, management positions • Provides support to set new managers up for success and broadens the base skills and Knowledge of existing managers |
| <p>Level 3: Supervisors</p> | <ul style="list-style-type: none"> • For those currently holding, or transitioning to, supervisory positions • Provides support to set new supervisors up for success <p>*Level 3 Specialty: Supervisor Specializing in Food and Beverage Production</p> |
| <p>Level 2: Occupations</p> | <ul style="list-style-type: none"> • For those in the process of acquiring their specific technical skills in the sector and directly involved in food and beverage production • Also value-added recognition for those already holding some kind of occupational recognition i.e. certification • Based on specific NOS/occupations, develops specific technical/occupational skills and establishes a comprehensive base of knowledge |
| <p>Level 1: Foundations</p> | <ul style="list-style-type: none"> • For those with 1 year of experience or less in a food and beverage processing work setting • Individuals in or seeking their first employment position in food and beverage processing • Establishes an understanding of the food and beverage processing sector |
| <p>Workplace Essentials</p> | <ul style="list-style-type: none"> • For those with no or little work experience • For those who are new to Canadian work culture or to Canadian food safety culture • Likely do not have Canadian High School Diploma • Provides foundation skills for working in the food and beverage processing sector |

DESCRIPTION OF LEVELS

The LRF has five levels: Workplace Essentials and Levels 1 through 4.

Entry and Admission Requirements

Workplace Essentials is for those with little or no work experience. It is also for those who are new to Canadian work culture or to Canadian food safety culture. There are no admission requirements for this level. These individuals likely do not possess a Canadian High School Diploma. The training at this level provides foundation skills for working in the food and beverage processing sector.

Level 1 – 4 have the following requirements.

| | |
|--|--|
| <ul style="list-style-type: none"> • Common Core Level 1 required • Common Core Level 3 required • Level 2 Principles of Food Safety core unit required • Recommend minimum of 1 year supervisory experience in any sector • Recommend food and beverage processing technical experience of 1 year • Recommend choice of at least one relevant Level 1 industry-specific elective (e.g. dairy industry, fish & seafood industry, etc). | <p>Level 4: Management</p> |
| <ul style="list-style-type: none"> • Common Core Level 1 required • Recommend food and beverage processing technical experience of at least 6 months • Recommend minimum of 1 year of work experience in any sector • Recommend choice of at least one relevant Level 1 industry-specific elective (e.g. dairy industry, fish & seafood industry, etc). | <p>Level 3: Supervisors</p> |
| <ul style="list-style-type: none"> • Common Core Level 1 required • Recommend 6 months experience in food and beverage processing environment • Recommend Workplace Essentials Thinking Skills • Recommend choice of at least one relevant Level 1 industry-specific elective (e.g. dairy industry, fish & seafood industry, etc). | <p>Level 2: Occupations</p> |
| <ul style="list-style-type: none"> • Canadian High School /CEGEP or equivalent OR Workplace Essentials required • Recommend Workplace Essentials Thinking Skills if have not taken the Workplace Essentials level | <p>Level 1: Foundations</p> |

Benefits of the Learning and Recognition Framework

- Provides a clear, hierarchal path of learning through the sector's competencies.
- Provides learners with a clear picture of what competencies are necessary in the sector.
- Provides training options for acquiring the competencies needed to progress in the sector.

Research has shown that standardized and recognized training with FPSC's LRF and accreditation strategy will be essential in addressing concerns expressed by employers that current educational programs are falling short in producing qualified candidates. The employer survey revealed that half of employers (49%) find educational programming designed to produce qualified graduates to be either "inadequate" or "non-existent". In contrast, just 7% consider it to be "excellent", while 32% find programming to be "adequate".

Section 10

Recommendations At the Crossroads to Greatness: Building the Workforce for Today and Tomorrow

This is a critical time for Canada's food and beverage processing sector.

The potential for significant growth and expansion – and the economic benefits this will bring to Canada and Canadians – is huge. But so too are the challenges.

As this report outlined, with the industry already facing labour and skills shortages in many of its sub-sectors, these challenges will be compounded by the need for processors to significantly increase their output to meet the industry's own growth targets and those set by the federal government's Advisory Council on Economic Growth and the Agri-Food Table. To reach the target of \$85B in exports by 2025, Canada will require 56,000 new workers representing nearly 20% of the current workforce. This requirement is further compounded by existing unfilled positions which are costing the industry \$8.5M each and every day, a situation that is not sustainable.





49% Canadians with little or no awareness of the food and beverage processing industry.

66% businesses more likely to generate annual sales growth with strong HR policies that outperform their peers.

“ To reach the target of \$85B in exports by 2025, Canada will require **56,000** new workers representing nearly 20% of the current workforce. ”

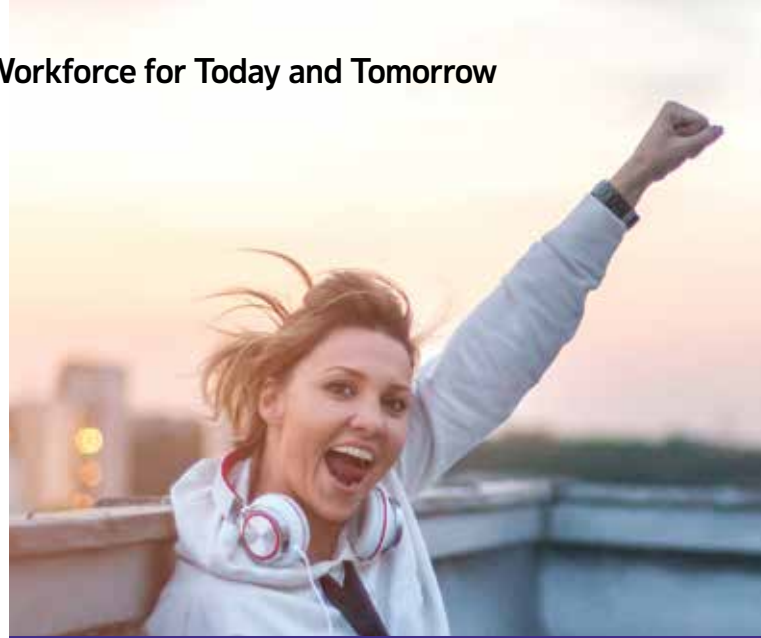
20% The amount Industry 4.0 integration could reduce labour requirements by.

A multi-faceted labour strategy is needed for the sector involving employers, industry associations, government and educational and research institutions. In particular, there is a need for programs to train production workers and engage underrepresented demographics, in addition to removing unnecessary barriers that make it difficult for businesses to invest in the innovation required to grow.

The strategy should optimize immigration to fill hiring gaps in both the short and long-term and adopt modern HR management practices for better recruitment and retention of workers. It must increase industry efficiency and automation, along with implementing a long-term competitive skills strategy to enhance worker skills and knowledge.



Broadly speaking, the strategy should include the following themes:



Shine a light and shout from the rooftops

Increase awareness of the sector and the career options it offers with a specific focus on labour market segments, including recent immigrants, youth, women and Indigenous Peoples.



Focus on the people

Find new ways to recruit, retain and train employees in a way that is responsive to industry gaps, and equip employers with modern HR management practices to better respond to an increasingly diverse workforce.



Treat Today like Tomorrow

Capitalize on opportunities with Industry 4.0 to create integrated supply chains that support businesses in responding to customer needs and optimizing the use of labour.



Open our Doors

Modernize and adapt immigration programs to better facilitate hiring of temporary and permanent foreign workers for short- and the long-term employment needs.



Remain Nimble

Continue to support the industry's adaptation to COVID-19 with current labour market analysis, best management practices and responsive programming.

Recommendations

➤ Positively Shift Industry Perceptions

Knowledge of the food and beverage processing industry is very low with just under half of Canadians with little or no awareness of the industry (49%). Only 31% have a positive impression of the jobs offered and barely one in six (17%) would apply for one of those jobs if it was available near them. For the meat and seafood processing sub-sectors, the results are even lower.

At the same time, the research indicates that four target audiences are promising sources of labour: youth, people with a history of tenuous attachment to the labour market recent immigrants, and Indigenous Peoples, with the most potential lying within the latter two segments. Ensuring the food and beverage processing industry has enough workers will require increasing awareness of the industry and changing public perceptions of it so more people will consider a career in the sector.



Recommendations

- 🍁 Establish a national awareness and reputation program, and ensure the program has measurable targets and defined audiences. Utilize research and insights from this report to support meaningful stories that promote careers and job opportunities, in addition to communicating education to career pathways.
- 🍁 Showcase good business practices including environmental programs and corporate social responsibility to engage iGen and young millennials.
- 🍁 Leverage existing industry and career initiatives including Taste Your Future, Frontline Food Facts, Feeding Your Future and AgCareers to attract underrepresented groups and inform job seekers.
- 🍁 Align skills training with the industry's skills gap to ensure the next generation of worker has every opportunity for success.
- 🍁 Create Occupational Outlooks for food and beverage processing positions to provide stakeholders with timely, reliable, and accessible information for key occupations in the industry.

“ Only 31% of Canadians have a positive impression of the jobs offered. ”

➤ Adapt Recruitment Strategies to the Workforce of the Future

The sector is predominantly male, aging and under-indexes on Indigenous Peoples. The data also shows a path forward on positioning the value of the sector with younger people, women, Indigenous People and new Canadians - many of these groups are already more familiar with the industry than the general public and have a slightly more positive view of it.

Recruitment strategies that connect with underrepresented candidates to work in food and beverage processing must be closely linked to programs designed to increase awareness of the sector and its appeal to different generations and demographics. It is also incumbent on employers to examine how their organization projects its values and principles to a range of audiences, from junior employees to customers, along with suppliers, the surrounding communities and governments. For example, are junior employees aware of CSR efforts? Are they participating in them? Similarly, do employees have a sense of how the organization contributes to feeding Canadians/the world, or how it contributes to the communities in which it operates?

Recommendations

-  Update job postings and other outreach and recruitment activities to appeal to a diverse range of people and ensure references to company values, contributions to community/country, the work environment and advancement possibilities.
-  Think about outreach to prospective employees, and engaging with existing employees through the lens of:
 - employee health and wellness
 - creating an environment where employees can make friends and social connections at work
 - providing information on the "big picture" issues e.g., company plans, goals, success, challenges and performance
-  Strengthen connections with local educators, workforce planning boards and groups representing New Canadians and racialized individuals to share employment opportunities.
-  Offer Work Integrated Learning opportunities to students, especially in the skilled trades, through local educational institutions to provide job experiences and a bridge to future employment.

The data shows a path forward on positioning the value of the sector with younger people, women, Indigenous People and new Canadians - many of these groups are already more familiar with the industry than the general public and have a slightly more positive view of it.



➤ Adopt Modern HR Management Practices

Human resource management is more than just hiring workers. It includes covering a wide variety of issues such as compensation, benefits, performance management, safety, wellness, employee motivation, skills development and workplace culture and environment.

Strong HR policies and practices not only make it easier to recruit and retain workers but also help to promote a good brand reputation with regulators and the general public and reduce legal and reputational risks. Research by the Business Development Bank of Canada found that businesses with strong HR policies outperform their peers and are 66% more likely to generate annual sales growth in excess of 10%. FPSC's *Future Skills in Food Processing Roundtable Report* noted how workplace culture is, by necessity, changing to support innovation and a new type of worker with new expectations and skills.

“ Commit to a workplace culture of the future that reflects openness, flexibility and diversity and empowers employees to make decisions. ”

Recommendations

-  Commit to a workplace culture of the future that reflects openness, flexibility and diversity and empowers employees to make decisions.
-  Ensure a commitment to continuous learning and upskilling and an environment where professional development and skilled employees are valued.
-  Provide support networks to new employees with coaching and mentorship.
-  Offer onboarding and training in relevant languages for your workforce. The most common languages in Canadian facilities are Southern European Languages (e.g., Spanish, Portuguese, Italian), South East Asian Languages (e.g., Thai, Vietnamese, Tagalog), South Asian Languages (e.g., Punjabi, Hindi, Urdu), Chinese Languages (e.g., Mandarin, Cantonese)
-  Create shared HR services bureaus in strategic locations. The bureaus could be staffed by HR and finance professionals to provide firms with expert advice and services on a temporary, as-needed basis. Services could include:
 - Recruitment and hiring assistance
 - Researching government and other HR-related programs (e.g., subsidies and grants)
 - Application completion/proposal writing assistance
-  Assistance with accessing government programs, for example with the completion of Labour Market Impact Assessments required under the Temporary Foreign Worker Program.
-  Raising awareness of job/career opportunities by forging closer links with secondary and post-secondary schools, as well as assisting with the development of experiential learning programs.

➤ Build and grow skills and knowledge

Canada's food and beverage processing industry faces considerable challenges recruiting enough workers with appropriate skills and training. While some jobs in the sector will continue to be foundational, requiring only limited skills and knowledge at the entry stage, many others will require higher levels of training or completely new skills due to innovation and automation and the introduction of new products, technologies and processes.

There are several types of training available to industry employers and people interested in working in food and beverage manufacturing through colleges, universities, private trainers and associations. The research indicates that in some regions training options are sufficient to meet industry needs, and in others there are gaps. Similarly, there is adequate training available in specific areas of study relevant to the industry, and deficits in others.



Recommendations

-  Identify the sectors or regions that are not served by the current educational offerings and determine how best to serve those populations.
-  Utilize existing industry and employer resources such as the Canadian Food Processors Institute and Food Skills Library to train people.
-  Pilot training and reskilling programs that are specific to future skills needs.
-  Collaborate with governments, unions and training institutions to develop more post-secondary education programs aimed at producing food and beverage processing production workers, particularly in areas of the country where such programs are currently scarce or non-existent, such as Atlantic Canada.
-  Ensure there are links between sector employers, job placement centres and programs with a Workplace Integrated Learning component to facilitate employment introductions.
-  Partner with industry and educators in further developing the Learning and Recognition Framework with new learning pathways and industry certifications.
-  Establish a post-secondary Accreditation Program to finalize an industry accreditation plan and initiate evaluation of course curriculum.
-  Ensure the Canadian Training Benefit is available to employers in the food and beverage processing industry.
-  Provide supervisory training for those currently holding, or transitioning to, supervisory positions to support new and existing supervisors in achieving success.
-  Ensure workers at all levels have access to Emotional Intelligence (EI) training to support more resilient and adaptable employees.

➤ Increase Industry Efficiency and Automation

Several emerging technologies are increasing the productivity and quality of food and beverage processors, yet a 2017 study of innovation in Canada's food and beverage processing industry found that Canadian processors trail their counterparts in the United States when it comes to investing in technology. This includes not only the use of computers and automation but also the significant transformation that will come through the adoption of "Industry 4.0," which adds smart and autonomous systems that use data and machine learning.

Increasing automation in the food and beverage processing industry requires considerable capital outlays which can be difficult for an industry facing low-profit margins and high regulatory and administrative costs. However, research shows that Industry 4.0 integration could boost labour productivity by as much as 0.8% annually. That may not sound like much, but this research shows that complete Industry 4.0 integration of the food and beverage processing industry over the next five years could reduce estimated hiring requirements by as much as 20%, from 56,000 to just over 43,000.

“ Research shows that Industry 4.0 integration could boost labour productivity and could reduce estimated hiring requirements. ”

Recommendation

- 🍁 Make new investments in the food and beverage processing sector for Industry 4.0 adoption that will:
 - develop "smart" factories that connect machines, devices, sensors and workers
 - create integrated supply chains that allow businesses to respond to customer needs and optimize the use of labour
 - increase the traceability of ingredients to support consumers in better monitoring where their food comes from and increase the speed and effectiveness of product recalls when needed
- 🍁 Quickly address the lack of access to reliable broadband service by food and beverage processing businesses in Canada's rural areas with the Universal Broadband Fund.
- 🍁 Provide new training or augment existing skills for workers in new demand areas such as biotechnology and nanotechnology, data management and automation/robotics.
- 🍁 Make investments in research and development and commercialization of new technologies, especially in uniquely Canadian products.
- 🍁 Create a specialized program to engage small and medium-sized enterprises in research and development.



➤ Use Immigration to Fill Hiring Gaps






Labour market tightness is a serious issue in many geographic areas - there simply aren't enough people. There is also an alarming volume of new workers needed to maintain the status quo, and to meet growth targets. Innovation and Industry 4.0 alone cannot bridge the gap.

New entrants to Canada will continue to play a critical role in addressing labour replacement and growth tensions. Immigration can support hiring gaps in two ways: by bringing in temporary workers to fill temporary labour and skills shortages, and by bringing in permanent residents to fill shortages for the long-term. New immigrants in particular have been identified as a group that is more likely than many to be interested in career opportunities in the sector.

Temporary foreign workers can be hired for seasonal or permanent jobs through the federal Temporary Foreign Workers Program and permanent workers enter Canada through economic immigration programs.



Recommendations

-  Simplify and streamline the Temporary Foreign Worker Program labour market impact assessment process, adjust the registration fee for multiple applications, introduce a mechanism for employers to discover why they were denied and appeal the decision if they choose, and update the Job Bank advertising rules.
-  Provide immediate relief in rural areas by removal of the Temporary Foreign Workers Program's 10% cap in rural areas where there is a shortage of workers and adjust two-year work permits to provide for the transition to Provincial Nominee Programs in all provinces.
-  Develop more capacity within pre-arrival training programs like FPSC's Food Safety Employment Readiness Program which provides training to successfully support an individual in starting a new career in Canada's food and beverage processing sector..
-  Continue to refine successful programs like the Atlantic Immigration Pilot Program which will become a permanent program, but still lacks a solution for seasonal employers.
-  Establish a plan to expand the Agri-Food Immigration Pilot to other food and beverage processing sub-sectors to address the nationwide labour shortage. This can be done by utilising specific criteria that reflect the labour market needs of the sub-sector or region.

➤ Conducting Business During COVID-19 and Industry Recovery

Research suggests that the impacts of COVID-19 on the Canadian food and beverage processing industry have been very negative, with close to half of companies feeling under threat by the spring of 2020, and especially in Quebec.

With customer orders down sharply and in the face of some abrupt shifts in consumer consumption habits, the industry has had to reconfigure workplaces to protect the health of employees, increased production in some areas and shifted production in others. While the situation in the food and beverage processing sector has been very challenging, comparative analysis suggests that it has coped relatively well compared to other sectors of the economy.

Prior to COVID-19 many in the sector would have said that to make the adjustment employers needed to make during this pandemic would have been impossible. In reality, adjusting of lines, modifying workplaces, expanding and contracting resource intake and synching with others in the sector has become the new norm.



Recommendations

- Have broad connections between governments and industry continue to work together in assessing COVID-19 impacts and targeting programs to areas of weakness.
- Conduct a comprehensive labour market information study on the fast-growing beverage sub-sectors (Soda, Beer, Wine, and Distilling) to provide a better understanding of the beverage sector, its role in the economy, and how to support its continued growth.
- Improve organization and classification of the NAICS codes, especially in Other Food Manufacturing (NAICS 3119), and particularly All Other Food Manufacturing (NAICS 31199), to make the information collected more relevant and useful to stakeholders.
- Conduct research into consumer behaviour and global trends to help businesses understand the shifts that may have taken place due to the COVID-19 global pandemic and where the greatest opportunities lie.
- Gain a better understanding of the strengths and weaknesses of the sector in facing the pandemic. What safeguards worked as intended? What were unforeseen challenges? How can the sector be better prepared to handle future pandemic level shocks?
- Map seasonal workforces in Canada, this will help seasonal food and beverage processors better target their recruitment for workers and help governments better understand labour availability and mobility.
- Model Canada's food economy to better understand and predict effects on the workforce from other major shocks related to trade, labour, transport and new pandemics. The pandemic caused a number of major shocks to the economy, this model will help to predict how different shocks (examples are: trade, labour, transport, pandemic) will affect the food and beverage processing sector and workforce / workforce needs.
- Develop new ways to provide labour market insight to stakeholders that are more accessible, interactive, and visual. This will help stakeholders engage with the information and see how to align their goals with the data.



“ Together, we must continue to keep the importance of innovation and adaptability central to the next chapter of our sector. ”

We have all learned a valuable lesson in this pandemic and that is to be nimble. Employers, industry associations, governments and educational and research institutions have found ways to innovate, change, pivot, and meet entirely new demands. Together, we must continue to keep the importance of innovation and adaptability central to the next chapter of our sector.

About FPSC

Food Processing Skills Canada is the food and beverage manufacturing industry's workforce development organization. As a non-profit, located in Ottawa with representatives across Canada, the organization supports food and beverage manufacturing businesses in developing skilled and professional employees and workplace environments.

The work of Food Processing Skills Canada directly and positively impacts industry talent attraction, workforce retention and employment culture. Through partnerships with industry, associations, educators and all levels of governments in Canada, the organization has developed valuable resources for the sector including the **Food Skills Library™**, **Canadian Food Processors Institute™**, **FoodCert™** and **Labour Market Information Reports**.

To download other labour market research completed by Food Processing Skills Canada, please follow these links.

[2020 Labour Market Information Survey – Canadian Food and Beverage Manufacturing Industry Report](#)

[Working Together – A Study of Generational Perspectives in Canada's Labour Force](#)

[Your Next Worker: What You Need to Know](#)



“ Educate, cultivate and empower an exceptionally skilled workforce. ”

- Our Vision





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main-d'œuvre en
transformation
alimentaire

Food Processing Skills Canada Resources

Labour Market Information Reports

– published reports in French and English to assist Canadian food and beverage manufacturers and stakeholders in understanding current and future labour markets.

2020 Labour Market Information Survey Report
– Canadian Food & Beverage Manufacturing Industry Report

Working Together – A Study of Generational Perspectives in Canada's Labour Force

Working Together – A Study of Generational Perspectives in Canada's Labour Force Summary

Cannabis Industry and Edibles Labour Market Report

Securing Canada's Fish + Seafood Workforce Executive Summary

Securing Canada's Fish + Seafood Workforce Final Report

Securing Canada's Meat Workforce Executive Summary

Securing Canada's Meat Workforce Final Report

National Occupational Standards: Changing Times. Evolving Skills. Recognizing Talent!

Meat of the Matter – Labour Challenges and HR Best Practices of Canada's Remote Meat Processors Final Report

Meat of the Matter – Labour Challenges and HR Best Practices of Canada's Remote Meat Processors Executive Summary

Climbing the Ladder – Understanding Career Paths in Quality Control + Quality Assurance

Technology Utilization in Canada's Seafood Processing Industry

Atlantic Fish + Seafood Processing Workforce Survey Report

Meat + Poultry Processing Workforce Survey Report

Your Next Worker What You Need to Know: Overview and Data from our Perceptions Research

Your Next Worker Everything You Need to Know: Perceptions of the People You're Trying to Reach

Securing Canada's Fish + Seafood Workforce – Highlights from a Labour Market Information Study of Canada's Fish and Seafood Processing Industry

Securing Canada's Meat Workforce – Highlights from a Labour Market Information Study of Canada's Meat Processing Industry

Pathways to Labour Solutions – Meat Processing Sector Review

Future Skills in Food Processing Round Table Report – Identifying the Skills of Tomorrow

Who is Processing Your Food? 2011 Food & Beverage Labour Market Information Study

Learning and Recognition Framework – a model for industry and educators that clearly defines qualifications for career paths and is the basis for certification and accreditation.

Accreditation Program Research Report – an assessment of accreditation models to support the industry and educators with consistent skills and competencies across training programs.

FoodCert™ – an initiative that provides certifications to individuals with proven skills.

Food Skills Library™ – a resource, especially useful for small to medium-sized businesses, with the latest essential skills, job competencies, language benchmarks, National Occupational Standards and human resource tools.

Canadian Food Processors Institute™ – online resources to support employers with a culture of continuous learning and job seekers in preparing for a career and advancement.

Succeeding at Work – a program available across Canada for employers and job seekers to support a skilled and resilient workforce with targeted curriculum.

Skills Training Atlantic Canada – a program available in Atlantic Canada to support employers in upskilling their workforce with technical and social-emotional learning.

BC Post-Farm Food Safety – a program designed for BC food and beverage manufacturers that provides funding for food safety implementation and COVID-19 support.

BC On-Farm Food Safety – a program designed for BC farm businesses that provides funding for food safety implementation and COVID-19 support.

iFood360° – a new program announced in March 2021 that will develop virtual reality training for employees and immerse students in a virtual environment to experience industry jobs.

Endnotes

- 1 While FPSC's employer survey was launched prior to COVID-19's most significant impacts, the majority of responses came in May, when the pandemic was top of mind for many business owners. Of the 740 total responses, 57% occurred in May, compared to 16% in February, 18% in March and 10% in April. Respondents were asked to answer all questions based on the last full calendar year of their business (i.e. 2019). However, it is reasonable to expect that employers also thought about the current state of their business, as well as their uncertainty about the future, when providing responses. While the project team remains confident in the insights described in this report, this fact should be considered when interpreting the survey's results.
- 2 <https://www150.statcan.gc.ca/n1/pub/81-004-x/def/4153361-eng.htm> The sample was randomly drawn from Leger Opinion (LEO)'s panel of survey respondents. Quotas were used to ensure that the sample reflected the Canadian labour force according to age and region. The data was also weighted to reflect labour force composition by age and region.
- 3 <https://www.agr.gc.ca/eng/food-products/processed-food-and-beverages/overview-of-the-food-and-beverage-processing-industry/?id=1174563085690>
- 4 "FCPC Industry Sustainability & Competitiveness Study," *Food and Consumer Products of Canada*, November 2, 2018, pp. 8-9
- 5 In 2015, Canada exported agricultural products worth US\$26.1 billion, representing 5.7 per cent of total global agricultural exports. (Source: "Unleashing the Growth Potential of Key Sectors", *Advisory Council on Economic Growth*, February 6, 2017, pg. 8)
- 6 Canada's agri-food exports in 2015 were US\$19.1 billion, or 2.8 per cent of the global total. (Source: Ibid.)
- 7 <https://capi-icpa.ca/wp-content/uploads/2020/04/pandemic-tests-Canada%E2%80%99s-agri-food-supply-chain.pdf>
- 8 North American Industry Classification System
- 9 Industry Canada defines a small business as having between one and 99 paid employees. Enterprises having between one and four paid employees are further defined as micro-enterprises. A medium-sized business has between 100 and 499 paid employees, and a large business has 500 or more paid employees.
- 10 "An Overview of the Canadian Agriculture and Agri-Food System 2017", op. cit.
- 11 In 2016, for example, there were more than 4,000 food and beverage processing establishments throughout Ontario, representing approximately 37 per cent of all establishments in Canada. The number of establishments in Ontario excluding those without payroll was approximately 2,400, with more than a quarter for bakery and tortilla manufacturing and almost one quarter in rural communities. Among those establishments with employees, 91.3 per cent were considered either micro or small – with fewer than 100 employees per establishment. (Source: "Labour Market Information for Ontario's Food and Beverage Processing Industry – Final Report", Prepared by Díaz Pinsent Mercier Research Inc. for *Food Processing Skills Canada*, January 2019, pg. 7)
- 12 For more detailed information about each of these sub-sectors, visit www.fpsc-ctac.com.
- 13 The Advisory Council on Economic Growth was established in March 2016 by the Minister of Finance "to develop advice on concrete policy actions to help create the economic conditions for strong and sustained long-term economic growth." For more information, see <https://www.budget.gc.ca/aceg-ccce/home-accueil-en.html>
- 14 "Unleashing the Growth Potential of Key Sectors," op. cit. pp. 2-3
- 15 Ibid., pg. 11
- 16 The Economic Strategy Tables were created in 2017 as part of the federal government's

Innovation and Skills Plan. They are "a new model for industry-government collaboration, focused on turning Canadian economic strengths into global advantages." Chaired by industry leaders, they are intended to "set ambitious growth targets, identify sector-specific challenges and 'bottlenecks,' and lay out an actionable roadmap to achieve their goals. For more information, see <https://www.ic.gc.ca/eic/site/O98.nsf/eng/home> .

- 17 "The Innovation and Competitiveness Imperative: Seizing Opportunities for Growth," Report of Canada's Economic Strategy Tables: Agri-food, ***Innovation, Science and Economic Development Canada***, September 25, 2018, pg. 2
- 18 The 2017 federal budget set a target to grow Canada's agri-food exports to \$75 billion by 2025
- 19 "The Innovation and Competitiveness Imperative: Seizing Opportunities for Growth," op. cit., pg. 14
- 20 Report of Canada's Economic Strategy Tables: Agri-food. <https://www.ic.gc.ca/eic/site/O98.nsf/eng/O0022.html>
- 21 "Global agriculture towards 2050," ***United Nations Food and Agriculture Organization***, October 2009
- 22 "Unleashing the Growth Potential of Key Sectors," op. cit. pp. 8-9
- 23 Canada's trade balance in processed food and beverage products includes a significant deficit in the trade of alcoholic beverages. In 2014, for instance, Canada imported alcoholic products worth \$3.9 billion and exported alcoholic products worth \$917 million, for an overall deficit of just under \$3 billion. By 2018, that deficit had grown to just under \$3.5 billion. (Source: *Canadian Industry Statistics*, Industry, Science and Economic Development Canada)
- 24 In the first year since CETA entered into force on September 21, 2017, trade between Canada and the European Union increased by 7.7 per cent. (Source: https://www.international.gc.ca/gac-amc/campaign-campagne/ceta-aecg/year_one-premiere_annee.aspx?lang=eng)
- 25 CPTPP member countries are Canada, Australia, Brunei, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam. Once fully ratified (it is currently in force in Canada, Australia, Japan, Mexico, New Zealand, Singapore and Vietnam), it will include 495 million customers and represent 13.5 per cent of global GDP.
- 26 CUSMA was signed on November 30, 2018. When it is ratified by all three countries, it will replace the 1994 North American Free Trade Agreement.
- 27 "Unleashing the Growth Potential of Key Sectors," op. cit. pg. 9
- 28 "The Innovation and Competitiveness Imperative: Seizing Opportunities for Growth," op. cit., pg. 12
- 29 Ibid. pg. 14
- 30 Survey was undertaken by Ipsos on behalf of FPSC with n=470 food and beverage processors between April 27 and May 20, 2020. The survey was a combination of on-line and telephone. No quotas were employed, and data is unweighted.
- 31 CBC News (April 13, 2020) <https://www.cbc.ca/news/canada/prince-edward-island/pei-lobster-processors-labour-1.5530666>
- 32 Western Producer (April 23, 2020) <https://www.producer.com/2020/04/dairy-farmers-to-reduce-milk-supply/?module=under-carousel&pgtype=section&i=>
- 33 CBC News (April 27, 2020) <https://www.cbc.ca/news/business/dairy-covid-19-1.5528331>
- 34 Western Producer (April 23, 2020) <https://www.producer.com/2020/04/dairy-farmers-to-reduce-milk-supply/?module=under-carousel&pgtype=section&i=>
- 35 CTV News (April 10, 2020) <https://www.ctvnews.ca/health/coronavirus/rather-than-dump-more-milk-this-farmer-s-trying-to-make-cows-produce-less-1.4891624>
- 36 LaTerre (April 20, 2020) <https://www.laterre.ca/actualites/covid-19/covid-19-le-prix-du-lait-a-la-ferme-pourrait-baisser-de-5-a-10>

- 37 CBC News (May 14, 2020) <https://www.cbc.ca/news/politics/wednesday-dairy-legislation-covid-1.5566594>
- 38 CBC News (May 26, 2020) <https://www.cbc.ca/news/canada/prince-edward-island/pei-potato-planting-1.5584692>
- 39 Canadian Grocer (May 25, 2020) <http://www.canadiangrocer.com/top-stories/headlines/meat-industry-says-more-safety-coming-with-covid-19-95056>
- 40 <https://www.hexaresearch.com/research-report/canada-alcoholic-drinks-market>
- 41 <https://www.canada.ca/en/services/health/campaigns/vision-healthy-canada/healthy-eating.html>
- 42 <https://brookfieldinstitute.ca/wp-content/uploads/Turn-and-Face-the-Strange-FINAL-online-1.pdf>
- 43 <https://www2.deloitte.com/ca/en/pages/consumer-industrial-products/articles/nurturing-new-growth.html>
- 44 <https://business.financialpost.com/cannabis/pot-is-so-hot-in-canada-that-firms-are-importing-workers>
- 45 Hill+Knowlton Strategies, 2019-20 research conducted for confidential client.
- 46 This estimate is based on total revenue of \$120 billion, total expenses of \$107 billion, and total employment of 266,000 in 2017. It is also assumed that each worker is employed for 260 working days per year. The vacancy cost per day is defined as (Total Revenue – Total Expenses)/ (Total Employment x Number of Working Days).
- 47 Source: Food Processing Skills Canada 2019 LMI Findings
- 48 17.1 per cent in 2015 (Source: "An Overview of the Canadian Agriculture and Agri-Food System 2017", *Agriculture and Agri-Food Canada*, November 10, 2017)
- 49 "Who is Processing Your Food?: 2011 Food & Beverage Labour Market Information Study", op cit., pg. 13
- 50 Some of these employment declines have resulted from increased productivity, including through investments in automation and other new technologies that require fewer employees but with more advanced skills.
- 51 This estimate is based on the weighted average of job vacancy rates for food manufacturing (NAICS 311) and beverage and tobacco product manufacturing (NAICS 312).
- 52 This estimate is based on total revenue of \$120 billion, total expenses of \$107 billion, and total employment of 266,000 in 2017. It is also assumed that each worker is employed for 260 working days per year. The vacancy cost per day is defined as (Total Revenue – Total Expenses)/(Total Employment x Number of Working Days).
- 53 Statistics Canada defines visible minorities as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour."
- 54 Source: Statistics Canada, 2016 Census
- 55 Source: Food Processing Skills Canada 2019 LMI Findings
- 56 "Who is Processing Your Food?: 2011 Food & Beverage Labour Market Information Study", op cit., pg. 14
- 57 Source: Food Processing Skills Canada 2019 LMI Findings
- 58 Source: Food Processing Skills Canada 2019 LMI Findings
- 59 Canada's workforce has fallen since 2000, and this downward trend is expected to continue. Labour force growth rates are forecast to remain below 0.2 per cent for at least the next decade, at

the same time that close to 40 per cent of small and medium-sized businesses are already having difficulty finding new workers. (Source: "Labour Shortage: Here to Stay," *Business Development Bank of Canada*, 2018, pg. 3)

60 "Securing Canada's Fish and Seafood Workforce," *Food Processing Skills Canada*, 2018

61 "The majority of processing plants in Atlantic provinces are located in remote, rural settings, with small and aging populations. ... In many regions, there are just too few people to meet the local employment requirements overall. ... (A)s processors try to grow, increase productivity and remain competitive, recruitment will occur within very tight regional labour markets, which already experience labour shortages during peak seasons; shortages that are predicted to continue into the foreseeable future." (Source: *Ibid.*, pp. 9-10)

62 "Securing Canada's Meat Workforce," *Food Processing Skills Canada*, 2018

63 *Ibid.*, pg. 9

64 The approximate age breakdown of the sample is as follows:

- Generation Z: 16 to 23 years of age (n=170)
- Young Millennials: 24 to 30 years of age (n=170)
- Older Millennials: 31 to 39 years of age (n=230)

- Gen X: to 40 to 55 years of age (n=405)
- Boomers: 56 years of age and older (n=520)

65 Dharssi, Alia. "A timeline of Canada's temporary foreign worker program," *Desperate Canadian businesses seek changes to temporary foreign worker program*, Calgary Herald. 14 September 2016.

66 <https://www.newswire.ca/news-releases/keeping-canadians-and-workers-in-the-food-supply-chain-safe-839428426.html>

67 'Young workers' refers to workers below the age of 30.

68 'Older workers' refers to workers aged 50 and over.

69 "Labour Market Information: Key Audience Choicebook™," *Food Processing Skills Canada*, October 2018

70 *Ibid* (supplemental analysis).

71 "Indigenous": includes people who identify as "Indigenous", including Metis, First Nation, Inuit, etc.

"Recent Immigrants": defined as born outside of Canada and having lived in Canada less than five years. "Tenuously Attached": defined as either currently unemployed and looking for work at the time of the survey or having been unemployed at least twice in the last 5 years. "Youth": defined as between 18 to 29 years of age, inclusively.

“Indigenous”:
includes people
who identify as:
“Indigenous”, including
Metis, First Nation,
Inuit, etc.”



www.fpsc-ctac.com

Food Processing Skills Canada (FPSC) 201-3030 Conroy Road, Ottawa, ON K1G 6C2 Tel: 613-237-7988 Toll Free: 1-877-963-7472