



Custom 2019 Sustainability Report



Our Approach

page 2 of 84

Overview

The protein industry plays an enormous role in nourishing billions of people, but also consumes resources and impacts our planet.

At Maple Leaf Foods, we are continually working toward more sustainable food production and a more sustainable protein industry. We believe the best way to drive change is by creating shared value – delivering value for our Company through addressing the significant environmental and social challenges that we face as a society.

“Maple Leaf Foods’ purposeful journey to be the most sustainable protein company on earth continued in 2019 with conviction as we took important steps that advanced us forward in creating better food, better care, better communities and a better planet. In 2019, we became the first major food company in the world to be carbon neutral NOW! It’s a win-win-win for the environment, for the consumers who are demanding more of the people who supply their food and for our company, as we respond to the expectations of our customers and our communities.”

– Michael H. McCain, President and CEO

Subsequent to December 31, 2019, the COVID-19 outbreak was declared a pandemic by the World Health Organization. The situation is dynamic and the ultimate duration and magnitude of the impact on the economy, society, the environment and on Maple Leaf Foods’ sustainability strategy is not known at this time. These impacts could include delays to sustainability projects, irregularities in our environmental footprint performance and community engagement activities undertaken. We are taking every step we can to protect our people as we continue our essential operations to deliver the food people need. Maple Leaf Foods is also actively engaged in supporting our communities through this crisis. We have announced several important actions to support our communities through emergency food relief and financial support for front-line health care workers.

Our Purpose

Maple Leaf Foods Inc. (the Company) is a forward-thinking, values-based company with a purpose to “Raise the Good in Food.” This purpose defines not just what we do as an organization, but why we do it. We have created a blueprint for our organization that summarizes our business strategy of delivering shared value to consumers, customers, our people, communities and shareholders.

In 2017, we hosted ideation sessions with the Company’s business functions to define strategies and processes that will help us achieve our vision to be the most sustainable protein company on earth. We spent time with our people trying to understand what our purpose to “Raise the Good in Food” means to them. We connected with over 170 of our employees, which resulted in over 200 unique ideas to help activate our purpose and vision.

Our Purpose Council, comprised of subject matter experts and senior leaders from different functional departments, assessed each unique idea against our vision, business

strategies and purpose. This assessment, spanning several months, narrowed down the unique ideas to 10 bold commitments and six key strategies, which now serves as the blueprint for our organization.

Our blueprint consists of tangible, actionable strategies, priorities and initiatives spanning our entire operation, and they all connect back to our vision “to be the most sustainable protein company on earth” and our purpose to “Raise the Good in Food.” Our blueprint is the plan we use to deliver shared value for our stakeholders – consumers, customers, our people, communities and shareholders.

Vision and Approach

Our vision to be the most sustainable protein company on earth and our shared value framework have helped define our four sustainability pillars:

Better Food

We are actively addressing the most pressing diet-related health issues we face as a society, including reducing artificial ingredients, antibiotics use and sodium levels, and continually advancing leadership in food safety.

Better Care

We have strong values that deeply define our culture and how we operate. These values extend to how we treat animals we raise or source. Better care for animals is one of our four sustainability priorities, and it reflects our goal to be a leader in animal care.

Better Communities

We value our communities and work collaboratively with organizations to reduce food insecurity in Canada. We value a culture and work environment that keeps people safe, rewards excellence and empowers everyone to learn and contribute their best.

Better Planet

We embrace a sustainable culture that focuses on eliminating waste in any resources we consume – including food, energy, water, packaging and time. In 2019, we became the first major food company in the world to be carbon neutral, and the first Canadian food company to set science-based targets for greenhouse gas emissions.

Our Sustainable Meat Principles

The food on our tables strengthens our bodies, our spirits and our bonds with each other. Healthful, soulful food should be a universal good and something we all can have.

But our food system has drifted from its roots – to nourish, to farm sustainably, to strive for social good, to connect deeply with our consumers.

At Maple Leaf Foods, we believe that we can raise everyone to better living, to a better life, by raising the good in food. To that end, we have developed a set of sustainable meat principles that will help guide and define our future.

We are driven by a conviction that Maple Leaf Foods can raise everyone to better living and to a better life by raising the good in food, and through our mission vision to be the most sustainable protein company on earth.

CEO Message

A Message from Our CEO, Michael McCain

Distinguished Harvard Professor and thought leader Michael Porter observed that, “Shared value is not social responsibility, philanthropy, or sustainability, but a new way for companies to achieve economic success.” But, long before the concepts of inclusive capital became mainstream, Maple Leaf Foods has been embracing this ethos as core to our business strategies. Maple Leaf Foods’ purposeful journey to be the most sustainable protein company on earth continued in 2019 with conviction as we took important steps that advanced us forward in creating better food, better care, better communities and a better planet.

In 2019, we became the first major food company in the world to be carbon neutral NOW! It’s a win-win-win for the environment, for the consumers who are demanding more of the people who supply their food and for our Company, as we respond to the expectations of our customers and our communities.

Becoming carbon neutral was a huge milestone for us as we followed through on a commitment we made several years ago: a 50% reduction of our environmental footprint by 2025. We are progressing towards that goal, however we are not moving fast enough. Therefore, in 2019, we upped our game, becoming one of only 290 companies in the world at that time to have set science-based greenhouse gas emissions targets (Scope 1, 2 and 3) approved by the Science Based Targets initiative. Science-based targets are globally accepted and aligned with the goals of the Paris Agreement on climate change. Importantly, they require that we reduce our emissions even as we grow, and that’s where our journey will continue.

In achieving carbon neutrality, we reduced our emissions and offset the remaining unavoidable emissions by investing in 10 high-impact, high-quality environmental projects throughout Canada and the U.S., most of them tied to the communities where we operate.

While some protein companies are poised to battle in response to criticisms of their environmental footprint, we take a different approach: we listen and we embrace change. We know that producing nutrient-dense products like ours takes resources, and we aim to offer consumers better food – products that they love for their taste, nutrition and cultural importance, and that they can feel good about ethically.

In 2019, we expanded our Raised Without Antibiotics (RWA) program to our Prime® brand in Western Canada and launched our Prime® Organic brand. We also made significant investments in growth in our plant protein business. We stepped up innovation efforts to bring a range of new plant-based protein products to foodservice and grocery stores, simplified their ingredients and introduced our customers to the idea that plant-based protein can be a delicious and nutritious part of a balanced diet.

Our work in advancing animal care also saw significant progress and positioned us as a true leader in animal care in North America. We have transitioned 77% of our total sows to our Advanced Open Sow Housing system to-date. To reduce stress in our pigs during transport, we converted 100% of our pig trailers to a hydraulic-lift deck system. Ninety

percent of our nursery and growing pig barns now have enrichments and toys to encourage natural behaviour. In poultry welfare, we commissioned our new state-of-the-art indoor lairage facility and controlled atmosphere stunning in our Edmonton, Alberta, fresh poultry operation.

Through it all, our commitment to our communities has only deepened. Maple Leaf Foods has contributed over \$8 million to initiatives working to advance food security to date through our Centre for Action on Food Security. In addition, more than \$5.3 million in healthful products have been donated to date. In addition to meeting immediate needs for financial and food support, we advocate policies that will solve the problem of food insecurity at its core and cut food insecurity in Canada in half by 2030.

To our customers, our consumers and all our stakeholders – we're listening and we hear you. We know you want products that you can feel good about from committed companies determined to give back to our society and the planet. We aim to be that company now and into the future.

Michael H. McCain
President and CEO

Reporting Approach

Reporting Approach

INFORMATION INTEGRITY

Maple Leaf Foods' management is responsible for the preparation and integrity of the information reported in our sustainability report. Sources for statistical information referenced that are not related directly to Maple Leaf Foods are either noted or available upon request. If you see a reference about currency, please remember that all financial information is reported in Canadian dollars. We believe this information accurately represents our sustainability initiatives and performance results for the 2019 reporting year (unless otherwise noted).

The reported data in the 2019 Sustainability Report found in these web pages covers the calendar year from January 1, 2019 – December 31, 2019 (unless otherwise noted). Reports from previous years are available in our Downloads section.

GLOBAL REPORTING INITIATIVE (GRI) STANDARDS

Our reporting practices follow the current Global Reporting Initiative (GRI) Standards as a reference and reflect the most current data and information we have about our business. We are reporting in accordance with the Core option of the GRI Standards and have chosen not to externally assure any of our standard disclosure items at this time.

To learn more about our GRI performance, please refer to our GRI Index.

SUSTAINABLE DEVELOPMENT GOALS

Maple Leaf Foods' sustainability strategy is well aligned with the United Nations 17 Sustainable Development Goals (SDGs). The SDGs are an urgent call to action by the United Nations for social, environmental and economic progress globally by 2030. These goals provide a universal and visionary framework for all countries, governments, companies and individuals to proactively address global challenges and implement strategies to improve health and education, reduce inequality, encourage economic growth and tackle climate change.

Given the nature of our business, we have identified the following SDGs that Maple Leaf Foods has the greatest potential to contribute to:

- SDG 2: Zero Hunger
- SDG 5: Gender Equality
- SDG 6: Clean Water and Sanitation
- SDG 7: Affordable and Clean Energy
- SDG 8: Decent Work and Economic Growth

- SDG 9: Industry, Innovation and Infrastructure
- SDG 10: Reduced Inequalities
- SDG 12: Responsible Consumption and Production
- SDG 13: Climate Action
- SDG 15: Life on Land
- SDG 16: Peace, Justice and Strong Institutions
- SDG 17: Partnerships for the Goals

[Click here](#) to learn more about how our targets and goals are aligned with these SDGs.

[Click here](#) to view SDG Logo Use Guidelines.

FEEDBACK

Our sustainability website is the main vehicle for reporting on our sustainability performance. We welcome all feedback on our initiatives and progress.

To submit feedback, or to ask a question, please contact us
[at sustainability@mapleleaf.com](mailto:sustainability@mapleleaf.com).

Materiality

Materiality

Engaging. Transparent. Purposeful. These three principles shape the way we communicate about sustainability at Maple Leaf Foods.

REPORT BOUNDARY

Our reporting boundary includes entities over which Maple Leaf Foods has operational control – our processing and manufacturing facilities, distribution facilities and offices (both leased and owned buildings), feed mill operations, pork barns, hatcheries and poultry barns. We have reported on performance indicators (i.e., GRI indicators) for these entities as applicable. In 2019, we added Viau Food Products Inc. and Cericola Farms Inc. into our reporting and restated our footprint intensity performance back to our baseline year of 2014.

Due to data limitations, we have not included our U.S. facilities in our solid waste data.

For entities over which Maple Leaf Foods has significant influence, including our contract hog, poultry growers, and key suppliers and co-manufacturers, we have disclosed our management approach. We have not reported on performance indicators (unless otherwise indicated) for these entities as they are independent businesses.

For additional information, please see Maple Leaf Foods' value chain and the Environmental Disclosure of Management Approach in our GRI index.

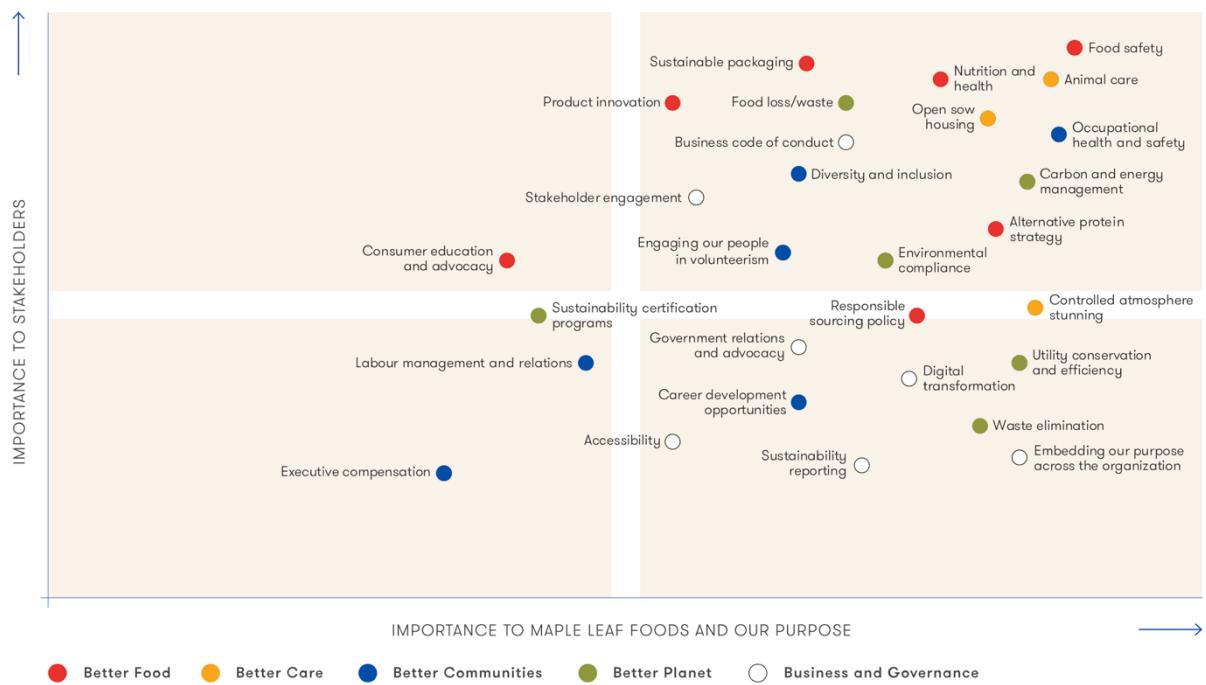
We seek to understand our stakeholders' opinions and needs through open dialogue and inclusiveness, which helps guide how we report on our sustainability initiatives each year.

MATERIALITY AND STAKEHOLDER INCLUSIVENESS

We place tremendous value on having an open dialogue about sustainability with Maple Leaf Foods stakeholders, including our employees, consumers, customers, shareholders, investors, suppliers, lenders, government, and non-governmental and non-profit organizations.

We compiled a comprehensive list of topics based on findings from consultations and surveys with employees, customer interviews, ongoing internal sustainability initiatives, competitive benchmark reports and discussions with key internal leaders who are in contact with our external stakeholders.

This list of topics helps guide our annual sustainability reporting.



* Materiality matrix updated in 2018

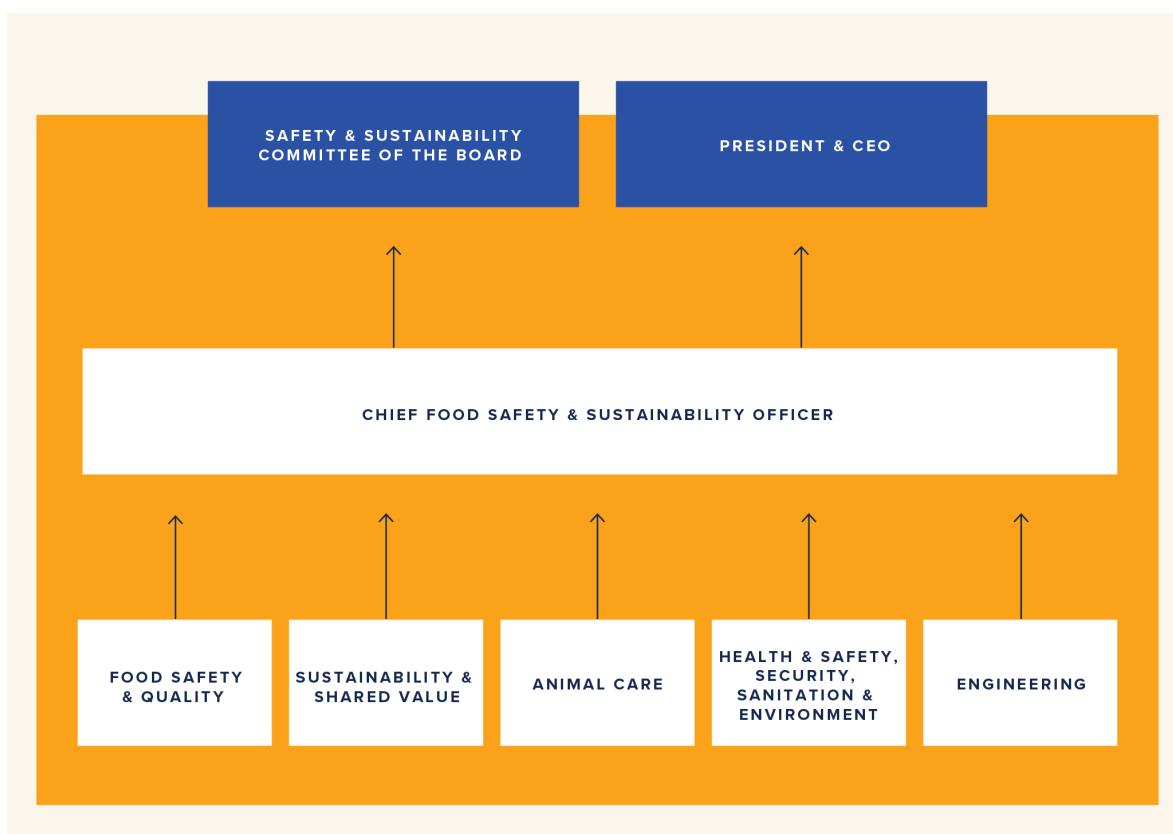
Governance

Governance

Our governance approach to sustainability provides a strong foundation, including strategic oversight, visibility, accountability and resources to support our purpose and vision to be the most sustainable protein company on earth. Finding the balance between what is good for our environment and society and what is best for our growth, and then focusing on opportunities that deliver both, are at the heart of our management processes and disciplines.

We communicate our sustainability initiatives and performance on a regular basis. Highlights of our internal and external communication include:

- Monthly reporting to the Senior Leadership Team
- Quarterly reporting to the CEO, COO and CFO
- Reporting (three times per year) to the Safety & Sustainability Committee of the Maple Leaf Foods Board
- Ongoing customer and stakeholder meetings and communications
- Ongoing intranet and social media channel updates
- Annual sustainability report and website update



Collaboration

Collaboration

We strive to take an active role in supporting continuous improvement by contributing our resources and/or knowledge to a broad range of organizations. These organizations include:

Meat and Livestock

- Canadian Meat Council*
- National Farm Animal Care Council (NFACC)
- North American Meat Institute (NAMI)*

Business Advocacy and Collaboration

- Brandon Chamber of Commerce
- Business Council of Canada (formerly Canadian Council of Chief Executives)*
- Canadian Association of Importers and Exporters Inc. (I.E. Canada)
- Canadian Manufacturers and Exporters Association
- Employers Advocacy Council (EAC)
- Grocers & Manufacturers Collaborative (GMC)*
- Manitoba Chambers of Commerce
- Manitoba Industrial Power Users Group (MIPUG)
- Ontario Chamber of Commerce
- Plant Engineering and Maintenance Association of Canada (PEMAC)

Food Processing

- Alberta Food Processors Association
- Conseil de la Transformation Alimentaire du Québec (CTAQ)
- Food and Beverage Canada
- Food & Beverage Ontario*
- Plant-Based Foods Association (U.S.)
- Plant-Based Foods of Canada

Food Services and Grocery Retailing

- Canadian Federation of Independent Grocers

- Restaurants Canada

Health/Nutrition/Food Safety/Food Security

- Agri-Subcommittee on Food Safety (ASFS)
- American Meat Science Association (AMSA)*
- Canadian Meat Science Association (CMSA)
- Food Allergy Research and Resource Program (FARRP)
- Food Secure Canada
- Institute of Food Technologists (IFT)
- International Association for Food Protection (IAFP)
- Ontario Food Protection Association

Marketing and Innovation

- Association of Canadian Advertisers
- Canadian Centre for Food Integrity (CCFI)*
- Canadian Food Innovators (CFI)*
- Food Processing Human Resources Council*
- GS1 Canada*
- Next Generation Manufacturing Canada Supercluster
- Protein Industries Canada
- Research Chefs Association

Packaging

- Packaging Consortium*
- Stewardship Ontario*

Pork Industry

- Ag and Food Exchange
- 21st Century Pork Club (Canadian and U.S. clubs)
- Canada Pork International*
- Canadian Pork Council
- Canadian Swine Research & Development Cluster (CDPQ)*
- Manitoba Pork Council*
- Pork Value Chain Roundtable
- Swine Innovation Pork

Poultry Industry

- Alberta Hatchery Association
- Association of Ontario Chicken Processors*
- Canadian Hatching Egg Producers*
- Canadian Poultry and Egg Processors Council*
- Chicken Farmers of Canada*
- Further Poultry Processors Association of Canada*
- IPWA/U.S. Roundtable for Sustainable Poultry and Eggs (Poultry & Egg Sustainability and Welfare Foundation)
- National Chicken Council (NCC)*
- Ontario Association of Poultry Practitioners (OAPP)
- Ontario Broiler Hatching Egg and Chick Commission*
- Ontario Hatcheries Association*
- Ontario Turkey Processors Association
- Poultry Industry Council
- Poultry Research Council
- Turkey Farmers of Canada
- Ontario Turkey Processors Association

Transportation and Logistics

- Private Motor Truck Council of Canada*
- Smart Commute Ontario

Sustainability

- World Business Council for Sustainable Development
- Canadian Business for Social Responsibility
- Canadian Roundtable for Sustainable Crops
- Roundtable for Sustainable Palm Oil
- Partners in Project Green – Toronto Regional Conservation Authority
- ISEAL Alliance

* Maple Leaf Foods holds a Board, Chair or Advisory position.

PROFILING OUR PARTNERSHIPS

Animal Health Canada (AHC)

Maple Leaf Foods is taking a leading role in championing Animal Health Canada (AHC) as a proposed public-private partnership to strengthen animal health risk management and protect the viability of the livestock, meat and dairy industries in Canada.

Animal Health Canada takes a holistic, results-driven governance approach towards ensuring the health and wellbeing of Canada's farmed animals, particularly by better protecting against foreign and production-limiting diseases. AHC would provide a collaborative space for government, industry and the veterinary profession to share information and resources to deliver animal health strategies and implement effective animal disease prevention, preparedness, response and recovery programming. AHC would strengthen Canada's efforts to protect against zoonotic diseases that can spread from animals to people.

To learn more, visit [Animal Health Canada](#).

Food Allergy Canada (FAC)

Working together, Food Allergy Canada (FAC), Université Laval and Maple Leaf Foods are leading a project on "Creating Food Safety Practices for Allergen Risk Management & Precautionary Allergen Labeling." The goals of the project are to develop common allergen management guidelines using a risk-based approach, guidance on the application of precautionary allergen labeling (PAL) and a broader understanding on the use of food allergen thresholds as a component of an overall allergen risk management plan. PAL is currently at the discretion of the manufacturer, is voluntary and is not regulated by Health Canada. Additionally, there are no specific Canadian allergen management guidelines used consistently across the food industry. Ultimately, by applying results of the research, allergenic consumers will have greater confidence in how PAL is applied by manufacturers, and PAL will be considered a meaningful tool to protect against potential allergen risks.

To learn more, visit [Food Allergy Canada](#).

Plant-Based Foods of Canada

Plant-Based Foods of Canada (PBFC) is a division of Food & Consumer Products of Canada (FCPC). The members of PBFC, including the Greenleaf Foods subsidiary of Maple Leaf Foods, provide choice for Canadian consumers as they look to include more plant-based protein options in their diets. PBFC works to educate consumers, government and industry partners about the nutritional and sustainability benefits of plant-based foods, consistent with the goals of Canada's Food Guide. Maple Leaf is supporting the organization's advocacy to modernize Health Canada's standards and labeling requirements for meat alternatives, update protein quality methodology, and advance consumer research and certification of plant-based foods. PBFC recently completed research on how best to merchandise plant-based foods through consistent store placement, helping both vegetarians/vegans and "flexitarians" find their preferred food items.

To learn more, visit [Plant-Based Foods of Canada](#).



Better Food

page 17 of 84

Overview

Goals

- Continue to expand our leadership in Raised Without Antibiotics (RWA) pork in North America and in RWA poultry in Canada
- Continue to execute the commitments of our Food Manifesto for our Maple Leaf® brand and be leaders of the real food movement
- Accelerate research and development efforts against a pipeline of innovation that advances our commitment to better food
- Enhance and streamline our Laboratory Information Management System (LIMS) processes
- Launch our Allergen Control Program

2019 Highlights

- Expanded our Raised Without Antibiotics (RWA) program to our Prime® brand in Western Canada
- Launched our Prime® Organic brand
- Continued expanding our leadership in plant-based protein
- Exceeded our Food Safety Incident Rate (FSIR) target by 53% and Quality Incident Rate (QIR) target by 15%
- Began rolling out our world-class Hazard Analysis and Critical Control Point (HACCP) training program to all plants
- Revamped our Allergen Control Program

We are actively addressing the most pressing diet-related health issues we face as a society, including reducing artificial ingredients, antibiotics use and sodium levels, and continually advancing leadership in food safety.

OUR JOURNEY TOWARDS BETTER FOOD

In 2018, we executed on our strategy to make better food that meets real consumer needs, as reflected in the product renovation of our Maple Leaf®, Schneiders and Swift brands. This strategy, developed in 2017 after exhaustive consumer research, resulted in an initiative to renovate our prepared meats portfolio across multiple dimensions, including taste, nutrition, affordability and sustainability.

We launched the most comprehensive changes in our Maple Leaf® brand history as part of our commitment to lead the real food movement. This has involved a sweeping revamp of the entire portfolio based on the commitments of our Food Manifesto.

Being leaders in the real food movement, leaders in authentic craftsmanship and leaders in great value – all by delivering clear food and brand choices: this is what making great food means to us. We have reformulated our products to include only premium meat and real, simple or natural ingredients. In addition to removing artificial preservatives, flavours, colours and sweeteners from our products, we only use pronounceable ingredients that consumers trust and can find in their pantry.

Read the Maple Leaf Food Manifesto.

Great food means different things to different people, and we want to meet those needs. We are committed to delivering to our consumers great tasting food with natural ingredients and better nutrition, and also produced in a safe work environment.

Nutrition

Nutrition

Great food means different things to different people at different times, and we want to meet all those needs!

Maple Leaf Foods completed exhaustive consumer research that has led to an initiative to renovate our prepared meats portfolio across our three brands: Maple Leaf®, Schneiders® and Swift®.

We launched the most comprehensive changes in our Maple Leaf® brand's history, taking out the ingredients you don't know or don't want and replacing them with natural, real or simple ingredients. Read the Maple Leaf Food Manifesto.

Consumers are increasingly looking for healthier prepared meats products that are made with simpler, natural ingredients.

In 2019, we continued to execute on our strategy to make better food that meets real consumer needs, as reflected in the complete renovation of our Maple Leaf®, Schneiders® and Swift® brands. Our strategy was supported by the most exhaustive consumer research project in our Company's history and led us to remake our entire portfolio of prepared meats brands and products. We focused on delivering much better tasting food, cleaner and more natural ingredients, and better nutrition. Importantly, we also did this in a way that would support our ambitious sustainability goals.

For the Maple Leaf® brand in particular, we developed a bold Food Manifesto to guide the reformulation of our recipes and ingredients. This kickstarted a sweeping revamp of the food, logo, packaging and communications for the entire brand. Now fully relaunched, the brand remains committed to making only real food from simple ingredients consumers can pronounce. All of our Maple Leaf® branded products contain only premium meat and real, simple or natural ingredients, supporting our ambition to be a proud leader of the real food movement. This is what making great food means to Maple Leaf.

SIMPLE AND NATURAL INGREDIENTS

In response to consumer demand for healthier prepared meats products that are made with simpler, natural ingredients, we renovated our Maple Leaf® brand products back in 2018 and reformulated them with ingredients that deliver the highest standard of nutrition, great taste and simplicity with nothing artificial.

INGREDIENTS THEN

Mechanically separated chicken, pork, water, modified corn starch, salt, potassium lactate, dextrose, wheat gluten, spice, corn syrup solids, sodium phosphate, sodium diacetate, sodium erythorbate, garlic powder, onion powder, sodium nitrite, smoke.

Contains: wheat

INGREDIENTS NOW

Chicken, pork, water, tapioca starch, sea salt, spice, vinegar, cultured celery extract, cane sugar, cherry powder, smoke.

NUTRITION EDUCATION

Knowing the right amount of which foods to eat each day and understanding how to read food labels are important to ensure a healthy lifestyle. To help Canadians make informed food choices, we are focusing on three priorities:

1. Easier-to-read labels

To help our consumers make informed food choices, we are simplifying and increasing the readability of our packaging. Maple Leaf® labels are now simpler and easier to read and have a consistent style across all product lines. Consumers are able to compare nutritional information between Maple Leaf products more quickly and easily.

As part of our Schneiders® brand refresh in 2018, which included an updated logo and packaging design, we renovated its product portfolio to offer consumers extraordinary taste with elevated artisanal flavours and new distinct packaging with easier-to-read labels.

2. Focus on the facts

We partnered with Health Canada, Retail Council of Canada, Food and Consumer Products of Canada, Canadian Federation of Independent Grocers and several leading food and beverage companies to launch the “Focus on the Facts” nutrition labeling education initiative. The goal is to help Canadians understand and use the Nutrition Facts table on packaged foods, with a focus on “Serving Size” and “Percent Daily Value.”

3. Better nutrition information at your fingertips

Under the direction of an independent dietitian, our Maple Leaf® brand website provides better, more engaging content to help people access nutritional information and plan their diets based on their needs.

PLANT-BASED PROTEIN

One of our blueprint strategies is to broaden our reach into protein alternatives. In the past few years, we established Maple Leaf Foods as a North American leader in plant-based proteins by forming Greenleaf Foods, SPC, a wholly owned subsidiary based in Chicago. We have two leading, highly complementary brands in this category, Lightlife™ and Field Roast Grain Meat Co.™, and we are building leadership in this space by increasing organizational and operational capacity and our pace of innovation.

Lightlife provides quality vegetarian and vegan foods prepared in the most healthy and sustainable manner. Meanwhile, Field Roast Grain Meat Co., based in Seattle, Washington, adapts traditional meat-making practices to craft vegetarian “meats” made from grains, vegetables and spices. Both brands have been answering consumer demand for plant-based products and have been bringing forward new, innovative products to grocery stores and restaurants in Canada and the United States.

Did you know? Almost all Lightlife and Field Roast products are Certified Vegan.

GREENFIELD NATURAL MEAT CO.TM

A key part of shared value at Maple Leaf Foods is to drive change through shifting our investments, operations and marketing strategies to support leadership in sustainability. Greenfield Natural Meat Co.TM is our leading sustainable meat brand, but it is more than a brand. Greenfield is more of “a company within a company.”

Greenfield Natural Meat Co.TM is a disruptor – a brand that advances sustainable meat production through leadership in animal care and the elimination of antibiotic usage in animal production and sourcing. Greenfield products also come from animals that are vegetable and grain fed and humanely raised by caring Canadian farmers.

This approach allows Greenfield to create products that have these sustainability attributes at the forefront. Greenfield has its own internal management, which allows it to be agile and responsive, and to push thinking on sustainable meat practices.

Greenfield is on a mission to change the meat industry and reflects the very best of what Maple Leaf Foods is doing to advance leadership in sustainability, raising the high bar that we have set even higher. Our investment and focus on sustainability will continue to be reflected in what the Greenfield brand brings to the market.

Visit greenfieldmeat.com to learn more.

Greenfield meat comes from animals raised without any added hormones or antibiotics. Our products contain nothing artificial and use only the best cuts of meat.

ETHNIC CHOICES

The Canadian population is becoming increasingly diverse. At Maple Leaf Foods, we are committed to providing consumers with a variety of wholesome and high-quality halal food under our Mina[®] brand.

Our Mina[®] brand is committed to providing consumers with a variety of wholesome and high-quality halal products. When it comes to processing all Mina[®] products, we strictly adhere to the food production requirements certified by the Halal Monitoring Authority (HMA).

We also comply with high standards of animal welfare. Mina[®] products are made with the finest quality, fresh chicken, plus, each chicken is air chilled and individually blessed.

We are also focused on providing our consumers with even more convenient halal options, including ready-to-eat meals and protein snacks. We continue to expand our Mina[®] product line to meet the growing demand for hand-slaughtered, ready-to-eat halal products such as: chicken tikka bites, falafel, tandoori chicken burgers and jalapeño beef burgers.

99% of our products under the Mina[®] brand have no artificial colours and flavours.

Food Innovation

Food Innovation

WHAT INNOVATION MEANS TO US

Innovation is the lifeblood of our business. We strive for continuous evolution and growth of our products and our business strategies. We are committed to advancing as an industry leader in food innovation and exceeding our consumer demands and expectations.

EXPLORING FOOD INNOVATIONS

In May 2019, we launched Maple Leaf Prime® Organic, which represents the pinnacle of fresh chicken products in Canada.

- Certified organic
- Non-GMO feed
- Raised without antibiotics
- Vegetable, grain fed with no animal by-products
- Humanely raised on Canadian farms

In September 2019, we expanded our Raised Without Antibiotics program to our Maple Leaf Prime® products in Western Canada.

- Raised without antibiotics
- Vegetable, grain fed with no animal by-products
- Humanely raised on Canadian farms

In April 2020, we launched a Maple Leaf® 50/50 beef and plant-based burger for consumers who love meat, but are consciously making an effort to eat less of it.

- Made with 50% less meat and natural, plant-based ingredients
- Zero taste compromise
- Gluten free
- Recyclable packaging

THINKFOOD! INNOVATION CENTRE

Our ThinkFOOD! Innovation Centre, located at our Meadowvale campus in Mississauga, Ontario, is dedicated to research and exploration for new product development. The

Innovation Centre offers collaborative spaces, laboratories, a pilot food processing plant, sensory testing rooms and multiple kitchens. In our largest open kitchen, we have around 30 employees collaborating and experimenting with new flavours and ingredients to craft authentic foods.

Products that we create go through a rigorous sensory evaluation to help us identify those of the highest quality. Our all-white sensory testing room was designed to minimize sensory distractions and ensure an objective experience. Our food testers objectively analyze several factors to ensure we are developing products that taste, smell and look delicious. The products that successfully pass the sensory evaluation are moved into our “Pilot Plant” where we assess the replicability of the products at a larger scale.

Our ThinkFOOD! Innovation Centre boasts a “Kitchen Stage” and a “Back-of-House Kitchen.” Kitchen Stage is a presentation room and simulated restaurant to host our customers and clients. Experienced chefs prepare and serve meals using our products in an open-concept kitchen and dining area. Our Back-of-House Kitchen enables customers and clients to use our equipment or bring in their own equipment to train employees and practice preparing meals.

**The ThinkFOOD! Innovation Centre is where innovation and collaboration happens.
It is where we craft the foods of tomorrow.**

Food Safety

Food Safety

OUR FOOD SAFETY COMMITMENT

At Maple Leaf Foods, we do our very best to minimize the presence of bacteria that can cause foodborne illness such as *Salmonella*, *Listeria* and *E. Coli*. Our goal is to always provide consumers safe, great tasting food produced in a safe work environment. To that end, we have created the Maple Leaf Food Safety Promise, which we stand by and adhere to in our daily duties.

FOOD SAFETY RECALLS

In 2019, Maple Leaf Foods had zero food safety recalls and two quality-related product withdrawals, a result of products that did not meet Maple Leaf Foods standards.

OUR GLOBAL FOOD SAFETY STANDARDS

We adhere to the Global Food Safety Initiative (GFSI) benchmarked standards across Maple Leaf Foods. All of our meat production facilities are audited annually by an internal food safety audit function and a third-party auditor following either the Brand Reputation through Compliance (BRC) or Safe Quality Food (SQF) standards, both of which are recognized by the GFSI. All of our fresh and prepared meats facilities adhere to these standards.

Our plant-based protein business in the U.S. is either certified to the BRC Global Standard for Food Safety or on the certification journey.

We continuously monitor the effectiveness of our efforts through aggressive testing of our manufacturing environment and our products. In 2019, we conducted more than 211,000 tests to measure quality and detect microorganisms, including pathogens, in our food processing facilities and products. We also regularly swab, test and sanitize all of our meat production areas, including manufacturing equipment, floors, walls and all surface areas for the presence of *Listeria*.

We monitor the effectiveness of our efforts through aggressive testing of our products and manufacturing environment. In 2019, we conducted more than 211,000 tests to measure quality and detect microorganisms, including pathogens, in our food processing facilities and products.

We require all of our raw material suppliers to have their facilities certified to a Global Food Safety Initiative (GFSI) benchmarked standard. We have actively tracked adherence to this requirement since 2015 and have discontinued business with several companies that were unable to meet our requirement.

We also supported those smaller companies that have committed to our GFSI requirement but needed extra time to comply. To date, we have achieved the following results on this commitment:

- 100% of co-manufacturers
- 99% of raw meat suppliers
- 90% of non-meat, food contact packaging and non-food contact suppliers

Our Food Safety and Quality team members are active participants in committees, task forces and workshops throughout North America and globally. We are represented on the food safety and regulatory committees of the Canadian Meat Council, the North American Meat Institute, the Canadian Poultry and Egg Processors Council, and the National Chicken Council (U.S.).

We are part of the core team of instructors at the bi-annual Advanced *Listeria* Control Workshop, sponsored by the North American Meat Institute. We also have representation on the Research Advisory Committee of the Foundation for Meat and Poultry Research. We have been a Sustaining Member of the International Association for Food Protection (the leading global food safety professional organization) for the past seven years as well as a Sustaining Partner of the American Meat Science Association, which has a mission to improve food safety through scientific advancements.

OUR ACCREDITED LABORATORIES

Maple Leaf Foods has three accredited laboratories that perform several types of testing to maximize our food quality and safety and minimize health risks. Maple Leaf Foods' accredited laboratories are ISO/IEC 17025 accredited with Standards Council of Canada. Our laboratories use advanced techniques and equipment to provide food safety risk assessments, investigative testing, method development and validation. Plus, our laboratory staff are trained and experienced in chemical and microbiological qualitative and quantitative analysis in food and food processing environments.

FIVE-YEAR FOOD SAFETY STRATEGY

We have mapped out a five-year strategy for food safety and quality with an overarching goal of relentlessly pursuing a world-class food safety and quality culture. This strategy represents the evolution of our Food Safety Promise and the commitments we made in 2009, which are embodied in our vision, "To always produce safe, great tasting food, produced in a safe work environment."

The strategy is put into action through the engagement of all Maple Leaf Foods employees and through a variety of initiatives, including:

- Ensuring food safety training for our people
- Establishing industry-leading food safety and quality metrics to embed accountability through transparent reporting rhythms and fact-based behaviour change
- Enabling our team members with digital tools that support our vision

- Executing our ambitious *Salmonella* reduction strategy in the poultry supply chain
- Enhancing preventative controls through improved Hazard Analysis and Critical Control Point (HACCP) plans, and expanded training and certification of associates
- Continuing to enhance and improve our already world-class *Listeria* monitoring program

FOOD SAFETY, QUALITY, METRICS AND TRANSPARENCY

The value of measurement, reporting and transparency cannot be understated. In 2017, Maple Leaf Foods launched a new paradigm for food safety and quality metrics that we believe will guide improved performance in our operations for years to come.

As part of this effort, we established the Food Safety Incident Rate (FSIR) and the Quality Incident Rate (QIR). These two indexed values are calculated each month for every production site based upon well-defined Key Performance Indicators (KPIs). For FSIR, we measure recalls, near misses, pathogen failures, repeat non-conformance on internal audit, regulatory non-conformance and consumer complaints for food safety-related issues. Similarly, the QIR metric has two KPIs: recalls and withdrawals for quality, and consumer complaints for quality.

The KPIs for each metric are used in a formula that generates the FSIR and QIR values on a monthly basis. Each month, plants across the enterprise are ranked by FSIR and QIR, and a review is held with the plant leadership group and senior management team, including the CEO, to discuss successes and failures.

2018 was the first full year of implementation. We used the prior year as a baseline and established a three-year goal to reduce FSIR and QIR by 75%. We are pleased to report that our food safety and operational teams executed effective plans that achieved the 2019 targets. Both FSIR and QIR came in below 2019 targets. We exceeded our FSIR target by 53% and QIR target by 15%. These results are a reflection of dedication and commitment to our Food Safety Promise from the manufacturing facilities.

SANITATION STRATEGY AND PERFORMANCE METRICS

Sanitation is a foundational and critical part of our food safety strategy. At Maple Leaf Foods, sanitation has always been an important part of our Environmental Monitoring program. In 2019, we did a complete overhaul of our Sanitation Strategy and incorporated our learnings and industry best practices.

As part of the development of the Sanitation Strategy, Sanitation Incident Reporting (SIR) was developed as a single sanitation performance metric that aligned with Total Recordable Incident Rate (TRIR), FSIR and QIR. Sanitation performance (effectiveness) is a key outcome of the strategy with a “bold new goal” to achieve an 80% improvement in sanitation performance by the year 2022.

Strategy deployment is supported by sanitation assessments by the corporate sanitation team to measure the current state at each plant and “partner” with plant teams to address the identified gaps. A corporate standard for the sanitation program was launched in 2019, and a stand-alone audit was created to measure plants’ compliance to the standard.

SALMONELLA REDUCTION STRATEGY IN FRESH POULTRY

Salmonella is a common pathogen on raw agricultural commodities, and fresh poultry is no exception. Maple Leaf Foods has always had a forward-looking approach to monitoring and mitigating the presence of *Salmonella* in our fresh poultry operations, and in 2019 we made major strides with our best-in-class, comprehensive plan for surveillance and reduction in the end-to-end supply chain.

For consumers, properly cooking fresh poultry kills *Salmonella*, but our path forward is to first focus on pathogen reduction. Our multi-year strategy will result in a significant improvement in the safety of our fresh poultry products by reducing the likelihood of the presence of the most pathogenic *Salmonella* serotypes, those most commonly associated with human illness. Our strategy includes process mapping of the supply chain from parent flocks and hatcheries, through the grow-out stage, and to the processing plant. The strategy will drive the implementation of best-in-class management practices, proven intervention techniques and practical steps in processing that will reduce risk. In 2019, we executed on our commitment to convert the entire portfolio of retail, chopped and formed par-fried chicken products from partially cooked, raw products to fully cooked products in an effort to make this category safer for the end consumer. Given that *Salmonella* can be transferred through the supply chain, we continued to trial various interventions at the breeder farm, broiler farm and processing plant to reduce the prevalence of *Salmonella* in our final products. As in previous years, we also continued to share our results and our learnings with industry peers and government authorities with the goal of raising the bar on this very important food safety challenge. Data from the Public Health Agency of Canada continues to show our *Salmonella* results are well below industry levels.

There are an estimated four million cases of foodborne illness in Canada every year. We are committed to reducing that risk to the lowest level possible through our food safety strategies and by empowering consumers with information to handle and prepare our products with confidence, so they are safe when served.



Better Care

page 29 of 84

Overview

Goals

- Continue transitioning sow barns to our Advanced Open Sow Housing system
- Implement environmental enrichments in 100% of our sow barns
- Implement enrichments in 100% of our nursery and growing pig barns
- Add climate-controlled poultry trailers to our fleet and complete rollout of our digital transportation monitoring system
- Implement animal care certification for employees in our animal operations

2019 Highlights

- Transitioned 50,000 sows (77% of total sows) to our Advanced Open Sow Housing system to-date
- Converted 100% of our pig trailers to a hydraulic-lift deck system to reduce pig stress during loading and unloading
- Installed enrichment and toys in 90% of our nursery and growing pig barns
- Developed an animal care certification program for our employees

Maple Leaf Foods has strong values that deeply define our culture and how we operate. These values extend to how we treat animals we raise or source. Better care for animals is one of our four sustainability priorities, and it reflects our goal to be a leader in animal care.

63% reduction

Since 2013, we have reduced our antibiotic usage by 63% across Maple Leaf Foods' owned pork farms.

100% Raised Without Antibiotics

We transitioned our Maple Leaf Prime® brand to 100% Raised Without Antibiotics in 2019.

Largest producer of RWA pork

Maple Leaf Foods is the largest producer of RWA pork in North America and the largest in Canadian poultry.

Commitment to Animal Care

Commitment to Animal Care

We are committed to enhancing our animal wellness practices in a manner that advances the Five Freedoms – the most widely accepted global standard for responsible animal care. We are also implementing the Five Domains of animal welfare into our culture – a widely adopted approach for assessing physical and functional factors that affect an animal's welfare and overall mental state.

RELATED READING

Download our animal care materials and learn more about our commitments.

OUR JOURNEY TOWARDS BETTER CARE

In our journey towards better care of our animals, we have significantly enhanced governance, investment and operational focus to build a world-class animal care program. Our veterinarians oversee animal care along with dedicated Canadian Food Inspection Agency (CFIA) staff at each of our processing plants.

We also believe that education and training are the foundation to knowledge, empowerment, accountability and a strong, animal care culture. All employees who handle animals receive animal care training when they commence employment, and this is reviewed at minimum annually.

Maple Leaf Foods will advance our strategic priority of responsible animal care through the following three initiatives:

- Demonstrating leadership in animal care policies and practices
- Investing in housing design and enrichment in all our facilities to support natural behaviours
- Investing in facilities, transportation and processes to eliminate pain and stress

LEADERSHIP AND COLLABORATION

Maple Leaf Foods works with numerous stakeholders to advance animal care practices across the industry. We also participate in committees and working groups that are working towards advancing animal care practices.

In 2019, we collaborated on leg health and wooden-breast trials with the University of Guelph and provided poultry supply chain “mini-internship” opportunities for students from the University of Alberta. We meet routinely with university researchers to provide input into their research priorities and learn from their ongoing work.

We also meet frequently with animal advocacy groups as they bring important perspectives to issues, global advancements and science related to animal welfare. We are committed to seeking open and constructive relationships with them.

STAKEHOLDERS, COMMITTEES AND WORKING GROUPS THAT MAPLE LEAF FOODS WORKS WITH:

- Member of the Manitoba Pork Council, which itself is a member of the Canadian Pork Council (CPC)
- Board director of the Canadian Poultry and Egg Processors Council (CPEPC) and participant in CPEPC’s annual Welfare Workshop
- Associate member of the National Farm Animal Care Council (NFACC)
- Board member of the Ontario Broiler Hatching Egg and Chick Commission
- Sponsor of the National Science and Engineering Research Chair in Swine Welfare at the University of Saskatchewan
- Member of the International Poultry Welfare Alliance (IPWA) and participant in the IPWA Broiler Subcommittee
- Platform partner and Advisory Board Vice-Chair of the Poultry Innovation Partnership in Alberta, formerly the Poultry Research Centre at the University of Alberta
- Expert panel member of the Sysco Animal Welfare Council
- Member of the North American Meat Institute (NAMI) Animal Welfare Committee and presenter at NAMI’s 2019 Animal Care and Handling Conference
- Participant in the Animal Health Canada Work Group
- Collaborator and supporter of animal health and welfare research projects

MONTHLY “CARING HANDS AWARDS”

To recognize people for their outstanding animal welfare practice, we have created a monthly award called the “Caring Hands Award.” This award goes to an individual or a team who leads or sets an example for outstanding animal welfare practice.

The awarded person or persons can be anyone – our hourly, salary or contract staff, or service providers.

Governance

Governance

We have significantly enhanced governance, investment and operational focus to build a world-class animal welfare program. Animal welfare is a shared responsibility with Maple Leaf executive leadership accountable for our performance.

Our Vice-President of Animal Care leads the implementation of our program, which incorporates leading science and advancements. Senior leaders routinely engage in animal care programs, policies and results through our internal Animal Care Council. Our Animal Health & Welfare Technical Committee and Animal Health & Welfare Technical Committee Working Group are comprised of experts from throughout our Company who meet routinely to identify requirements, advance practices and monitor progress. In addition, we work with a council of external experts, our Maple Leaf Animal Care Advisory Council, to recommend best practices, scientific research and innovation in an effort to help us continually improve. Animal care reports are submitted quarterly to the Safety and Sustainability Committee of the Maple Leaf Foods Board.

Senior leaders of our hog production, poultry and pork businesses continue to maintain operational responsibility for animal care, regularly reviewing reports and audits, and signing off on policies. Within the business, we have five veterinarians who oversee animal welfare, along with dedicated Canadian Food Inspection Agency veterinarians and staff at each of our processing plants. Animal welfare metrics are reported regularly, and non-compliance or audit failures are addressed immediately.

EDUCATION AND TRAINING

Education and training are foundational to knowledge, empowerment, accountability and a strong animal care culture. Every employee involved in the raising, transport and processing of poultry must be trained on and adhere to our animal care policies and procedures. All employees who handle animals receive animal care training when they commence employment, and this is reviewed minimum annually. Training is a critical part of building a strong animal care culture. In 2019, we developed an animal care certification program for Maple Leaf Foods employees and developed new animal care training video modules for employees working in our fresh pork business.

Maple Leaf Foods has over 50 experts who are Professional Animal Auditor Certification Organization (PAACO) certified across our pork and poultry operations, and they monitor animal welfare every day. Our people who are PAACO trained have deep knowledge and skills related to animal welfare monitoring and reporting.

STANDARDS OF PRACTICE

Maple Leaf Foods Agri-Farms raises approximately 41% of the pork that we process, with the balance coming from contracted producers. In our poultry operations, we operate three broiler chicken hatcheries and source our supply of chicken from independent producers.

We do not ever use genetic engineering, cloning, growth promoting hormones or beta-adrenergic agonists in any poultry and pork supplying our operations.

We routinely evaluate various poultry genetic strains to ensure we are raising healthy chickens with high welfare in an environmentally responsible way.

All animals in our operations undergo pre-slaughter stunning to ensure they are insensible to pain. The effectiveness is routinely monitored by employees and through internal and third-party remote video auditing. Pre-slaughter stunning is required for all animals in our supply chains.

PHYSICAL ALTERATIONS

All piglet physical alterations in Canada are performed with medication for pain control in accordance with the National Farm Animal Care Council (NFACC) Code of Practice. We do not ever perform teeth clipping or ear notching on our piglets, and tattooing of piglets is limited to genetic replacement animals only. Currently, tail docking is a necessary piglet procedure in order to prevent tail injuries from other pigs. We are continuously improving our pain-relief protocols and evaluating alternatives to castration.

Poultry physical alterations are necessary in breeding birds for the long-term welfare of the flock to reduce or eliminate injuries that may cause pain. In Canada, any physical alterations, such as beak and toe treatments, are performed using the most humane methods possible and limited to only essential alterations. All broiler chickens that Maple Leaf Foods sources never undergo physical alterations, including beak treatment, consistent with the NFACC Code of Practice. No physical alterations are performed in Maple Leaf Foods owned hatcheries.

TRANSPORTATION

All of our chickens that are processed in Alberta come from barns in Alberta and all of our chickens processed in Ontario come from barns in Ontario. The majority of chickens supplying our fresh poultry plants (approximately 91%) spend less than three hours in transit, while approximately 7% spend three to five hours travelling, and the rest (approximately 2%) do not exceed seven hours of travel time. Most pigs supplying our fresh pork plants (approximately 80%) spend less than four hours in transit and less than 5% of them spend over 12 hours travelling. We are compliant with the transportation requirements set by the Government of Canada Humane Transport Regulations and Safe Food for Canadians Regulations.

The transportation of all animals must adhere to regulatory standards. All drivers transporting animals to our processing plants must be certified in Transport Quality Assurance® (TQA) or have Canadian Livestock Transport (CLT) certification or equivalent.

WITHIN OUR OPERATIONS, MAPLE LEAF FOODS ADHERES TO A NUMBER OF STANDARDS, INCLUDING:

- National Farm Animal Care Council (NFACC) Codes of Practice

- North American Meat Institute (NAMI) Animal Handling Guidelines, Canadian Quality Assurance Program and Animal Care Assessment Program (called Canadian Pork Excellence and PigSafe, starting in 2020)
- Canadian Hatching Egg Producers CHEQ™ and Animal Care Programs
- Chicken Farmers of Canada Animal Care Program
- Chicken Farmers of Ontario Farm Worker Safety Program

Monitoring Animal Welfare

Monitoring Animal Welfare

AUDITING AND CORRECTIVE ACTIONS

A well-defined, rigorous and highly visible internal and independent auditing program is essential to reinforce high standards of animal care.

Our employees, who have undergone extensive training through the Professional Animal Auditor Certification Organization (PAACO), conduct weekly audits of our hog and poultry facilities. Our meat processing facilities are monitored daily for animal health and quality by on-site Canadian Food Inspection Agency veterinarians and our PAACO-trained employees.

OUR HATCHERIES AND POULTRY BARN OPERATIONS

Our hatcheries comply with the National Farm Animal Care Council (NFACC) Code of Practice, and Canadian Hatchery Federation (CHF) and National Chicken Council (NCC) standards for welfare in broiler chicken hatcheries.

All of our hatcheries are audited at least annually by an independent auditor and monthly by our PAACO-trained people. The CFIA also audits our processes, animal welfare documents and training records on a regular basis. We regularly monitor the placement of chicks into barns to ensure proper chick handling and barn conditions.

Maple Leaf Foods' owned pullet and broiler breeder flocks are internally audited monthly according to the NFACC Code of Practice, Canadian Hatching Egg Producers (CHEP) Animal Care Program and NCC standards by our PAACO-trained auditors. Hatching egg producers are also audited by their provincial board for compliance with the CHEP Animal Care Program.

Our third-party broiler chicken farmers undergo internal animal welfare audits by our PAACO-trained Animal Health and Welfare Technicians (AHWT) and are also audited by their provincial chicken board for compliance with the Chicken Farmers of Canada Animal Care Program.

Our trained auditors routinely perform chicken catching and loading audits of our third-party contracted catching companies and live haulers. Our investment in dedicated, trained auditors responsible for supporting on-farm animal welfare practices of third-party broiler chicken farmers is leading to improvements in bird welfare from chick placement through to catching, transportation and processing.

All of Maple Leaf Foods' owned hog production operations are audited annually by our internal quality assurance personnel as well as by a third-party HACCP- and PAACO-certified auditor. Maple Leaf Foods is the first company in Canada to move to full, annual on-farm Canadian Pork Excellence program audits that include animal-based measures. In addition, our owned hog farms receive routine service visits by our internal technical experts. Our five feed mills are licensed by CFIA and are subject to annual audits as well.

Our third-party hog suppliers to our pork plants are required to follow the protocols of the Canadian Quality Assurance Program and Animal Care Assessment Program. These programs will be called Canadian Pork Excellence and PigSafe starting in 2020, and all elements of the programs are audited by certified auditors. Increasing the visibility of the animal welfare practices of our suppliers, which historically has been the primary responsibility of provincial associations, will be an important part of broader improvements to our program. This will include sharing knowledge and advancements we make in the areas of auditing and reporting, training and operations.

MEAT PROCESSING OPERATIONS

Our meat processing facilities are monitored by dedicated on-site inspectors from the CFIA. All our processing operations are required to undergo comprehensive third-party animal welfare audits, a minimum of annually, which are conducted by PAACO-certified auditors. These third-party auditors have open access to our facilities and the freedom to interview any of our employees as part of the audit process. This is a leading practice, which allows us to test the effectiveness of our animal welfare practices and procedures based on established and quantifiable animal wellbeing guidelines.

THIRD-PARTY REMOTE VIDEO AUDITING

Using modern auditing techniques for system oversight is an important element of accountability. Remote video auditing (RVA) involves daily video-based auditing of our operations by trained third-party auditors. These auditors send out an immediate notification upon observation of any concern or infraction.

Our auditing is performed by industry-leading, third-party expert Arrowsight, who ensures we capture the critical points of animal handling at our hatcheries and primary processing facilities. We are also working with Arrowsight to test mobile RVA technology capable of auditing catching and loading processes on chicken and pig farms.

Responsible Antibiotic Use

Responsible Antibiotic Use

Our society is becoming increasingly concerned about the use of antibiotics in animal production with alternative drug choices for the treatment of many bacterial infections becoming more limited, more expensive or non-existent.

Maple Leaf Foods is committed to minimizing or eliminating the use of antibiotics wherever possible, while maintaining high standards of animal care. We are actively engaged in industry and government efforts to reduce antibiotic use in livestock operations, including increasing veterinary oversight of antibiotics prescribed to livestock.

We reduce antibiotic use through our Raised Without Antibiotics (RWA) program, which focuses on providing excellent management, health and nutrition to our animals so that antibiotics are rarely required. Should any animal, herd or flock that is in our RWA program become sick, all treatment options are considered in consultation with a veterinarian, including administering an antibiotic. If an antibiotic is administered, the treated animal, herd or flock is removed from the program. We are actively implementing operating protocols that reduce higher mortality rates in animals that are raised without antibiotics, which is one of our animal care priorities.

Antibiotic Usage Reduction

Year	%Change
2013	0.00
2014	41.92
2015	-68.55
2016	-40.78
2017	-53.30
2018	-66.09
2019	-62.61

Since 2013, we have reduced our antibiotic usage by 63% across Maple Leaf Foods' owned pork farms.

We transitioned our Maple Leaf Prime® brand to 100% Raised Without Antibiotics in 2019.

Maple Leaf Foods is the largest producer of RWA pork in North America and the largest in Canadian poultry.

Innovations in Animal Welfare

Innovations in Animal Welfare

OUR COMMITMENT TO ADVANCED OPEN HOUSING FOR SOWS

In 2007, Maple Leaf Foods was the first major company in Canada to commit to converting sows from gestation crates to an enhanced open housing system. By the end of 2019, Maple Leaf Foods had transitioned approximately 50,000 sows (77%) to our Advanced Open Sow Housing system.

When Maple Leaf Foods set out to assess open housing methods, we worked closely with the University of Manitoba and other industry participants. We wanted to assess current methods and define adaptations that were needed to support Canadian hog production. In 2007, we made our original commitment to move to open sow housing by 2017.

We began significant conversion activities in 2013 to two of our sow barns and transitioned 1,250 sows to our Advanced Open Sow Housing system.

We met our 2007 sow housing commitment in 2017; however, since 2007, Maple Leaf Foods has acquired an additional 33,000 sows. By the end of 2019, we had successfully transitioned approximately 50,000 sows (77% of all our sows) to our Advanced Open Sow Housing system, where sows are free to roam, feed and socialize.

We have now developed an accelerated plan that will result in all Maple Leaf Foods sows being moved to our Advanced Open Sow Housing system by the end of 2021.

It takes a great deal of skill and attention to transition animals from a confined environment to enhanced open housing in a way that minimizes the natural aggression and competition for food that often results. A significant amount of research, investment and experience has enabled Maple Leaf Foods to support conversion of sows from confined to advanced open housing in a way that optimizes animal care.

TRANSPORTATION

One of our recent advancements is the purchase of hydraulic-lift trailers. In 2019, we completed converting all of our pig trailers to hydraulic-lift decks to reduce stress during loading and unloading. These trailers bring the pigs from the sow barn to nursery barn, and from the nursery to the finishing barns.

In our poultry operations, we are investing in climate-controlled poultry trailers as part of our trailer fleet. We are also implementing a real-time, digital temperature and humidity monitoring system across our poultry transportation system.

TRIALING FREEDOM FARROWING SYSTEMS

In 2019, we began a small-scale trial using two different designs of freedom farrowing systems (maternity pens). This allows sows that are nursing piglets more space and increased freedom of movement, while still protecting their piglets from being injured by the sow. The pilot has been successful in allowing increased freedom of movement and not compromising the safety of the piglets. This trial will continue in 2020 and beyond as we gather more data and increase our understanding of sow and piglet behaviour and interaction in these advanced welfare maternity pens.



Better Communities

page 42 of 84

Overview

Our Goals

- Invest over \$10 million by the end of 2020 to advance sustainable food security
- Conduct a high-impact external campaign that engages consumers and policy makers to advance food security
- Accelerate progress of our 50% gender equity for leadership roles held by women by 2022
- Strive for a Total Recordable Incident Rate of 0.60 or less
- Strive for a Days Away, Restricted or Transferred Rate of 0.25 or less

2019 Highlights

- Contributed over \$8 million to initiatives working to advance food security to-date
- More than \$5.3 million of healthful products have been donated to-date
- Achieved 38% representation of women at the manager level and 31% representation of women at the director level
- Achieved a Total Recordable Incident Rate (TRIR) of 0.60
- Achieved a Days Away, Restricted or Transferred (DART) Rate of 0.21

We value our communities and work collaboratively with organizations to reduce food insecurity in Canada. We value a culture and work environment that keeps people safe, rewards excellence and empowers everyone to learn and contribute their best.

PARTNERING WITH ORGANIZATIONS

The Maple Leaf Centre for Action on Food Security partners with organizations across Canada to advance food security.

Here are some of the innovative programs we are supporting:



Food Security

Food Security

People are food secure when they have stable access to affordable, nutritious and culturally appropriate food. People who are food insecure worry about running out of food, compromise on food quality in order to eat enough or go hungry, often missing meals because of lack of money for food. Food insecurity is largely rooted in poverty.

It is a shameful reality that in Canada, a country of considerable wealth and food resources, over four million people face food insecurity. This is not a food issue – we have plenty of food to nourish everyone. While geographic, health and literacy factors play a role, this is largely an issue of poverty and lack of income.

The statistics are shocking

- 4.4 million Canadians (one in eight households) experience some level of food insecurity, affecting one in every six children*
- 72% of children in Nunavut live in food insecure households, the highest level in Canada**
- Aboriginal and black households have a rate of food insecurity that is 2.5 times higher than that of other Canadians*
- Food insecurity is a serious public health problem, as physical and mental health is closely linked to household food insecurity

Despite global advances, levels of food security in Canada over the past decade have not improved and have in fact worsened in some provinces.

* Source: Household Food Insecurity in Canada, 2012, PROOF

** Source: Household Food Insecurity in Canada, 2015–16, PROOF

4.4 million Canadians, or 12% of households, face food insecurity.

MAPLE LEAF FOODS CENTRE FOR ACTION ON FOOD SECURITY

Maple Leaf Foods has a long-term commitment to advancing sustainable food security and going well beyond conventional corporate philanthropy. In late 2016, we launched the Maple Leaf Centre for Action on Food Security (the Centre), a registered charity governed by an independent Board of Directors. The Centre is committed to working collaboratively across sectors to reduce food insecurity in Canada by 50% by 2030 and advocating for critical policies.

In 2018, the Centre worked with a number of civil society and private sector partners to advocate for a national food policy that would address issues of poverty and food insecurity and establish a governance framework that would incorporate the views and expertise of various stakeholder groups as the government shifts from policy to program

implementation. A Food Policy for Canada was announced in 2019 with “helping Canadian communities access healthy food” as one of four priorities.

The Centre seeks to raise the profile of food insecurity as we invest in programs required to make sustainable change. We have established The Feed Opportunity Fund, which provides grants to organizations engaged in testing and expanding innovative approaches to advancing food security, with the goal to capture and share learnings, and identify approaches that may be scaled to increase their impact.

In 2019, the Centre launched nine scholarships to support master’s or PhD students who pursue research that contributes to the body of knowledge on food insecurity. Three scholarships will be distributed each year, beginning in the 2020/2021 academic year.

OUR PRINCIPLES

1. We support food-based initiatives that promote dignity and build individual and community capacity to advance food security.
2. We support partnerships that advance sustainable solutions to food insecurity.
3. We support innovation, learning from what doesn’t work as well as what does.
4. We connect our people and their expertise with our partners through skill matching and volunteerism.
5. We build partnerships with governments, academia, non-profit organizations and the private sector to advance change and progress.
6. We seek to advance collective knowledge and impact, sharing the learnings with others.

1 in 6 Canadian children and 1 in 8 Canadian households are affected by food insecurity.

PARTNERING WITH ORGANIZATIONS

The Maple Leaf Centre for Action on Food Security partners with organizations across Canada to advance food security.

Here are some of the innovative programs we are supporting:



Here's what our partners have to say about our working relationship:

"The Maple Leaf Centre for Action on Food Security has been key in helping us to become a national leader in the food security sector. As a funder, they understand the importance of dedicated and flexible support. This has enabled us to innovate, expand and adapt our work. We've leveraged the Centre's investment in our collaborative Knowledge Exchange program to build a national network of 183 Good Food Organizations and shift the food security space towards more impactful programs that are centred around equity, dignity and health. As they've worked to innovate in their own approach, we've enjoyed an iterative and collaborative relationship with the shared goal of changing the national conversation around food insecurity."

Nick Saul, CEO, Community Food Centres Canada

"The Depot's Boîte à Lunch after-school program offers educational nutrition and cooking workshops to grade 4 and 5 children in low-income neighbourhoods with the aim of building food skills and fostering an empowered and positive relationship to healthy food. Our partnership with the Centre not only allowed us to develop and test an innovative solution to scaling the program, but their collaboration helped us to deepen our understanding of its impacts and plan for sustainability."

Daniel Rotman, Executive Director, Depot CFC

"The Northern Manitoba Food, Culture and Community Collaborative partners with about 30 community-led food security projects annually, and through those partnerships thousands of people in northern Manitoba have developed food-related skills, increased the availability and quality of foods, and have planted the seeds of possibility for the future. The people of northern Manitoba are leading a movement to health and strength through strong food systems, and we are proud to be good partners in that movement.

It has been a pleasure and benefit to have staff from the Centre and Maple Leaf Foods contribute to and take part in this work. We didn't know what to expect from this partnership, as the Centre represented our first deep connection to the business world. The team has demonstrated great enthusiasm and support for the work as regular participants in our work."

Julie Price, Tides Canada

SUPPORTING BAHAMAS' DISASTER RELIEF PROGRAM

In 2019, one of the most powerful and devastating hurricanes ever recorded, Hurricane Dorian, struck the Bahamas. In the aftermath, organizations and individuals across the world mobilized to support recovery efforts. In response to the destruction to communities and ecosystems, Maple Leaf Foods and the Maple Leaf Foods Centre for Action on Food Security donated CAD\$10,000 to The Nature Conservancy's Bahamas Program to support climate action and climate change resilience efforts.

Engaging with Our Communities

Preparing Nutritious Meals

Maple Leaf Foods people volunteer at Eden Food for Change.

A team of volunteers headed out to Eden Food for Change to help prepare meals and learn about the organization. Eden Food for Change has developed a community food model that responds to the needs of hungry families with a long-term, sustainable approach.

Eden allows clients to “shop” from the facility, letting individuals choose from the stocked shelves for items that they will need, helping reduce the waste of receiving items they cannot use.

Eden also offers cooking lessons in the Learning Kitchen, where our team of volunteers helped prepare over 750 nutritious meals using Maple Leaf chicken.

Growing Our Own Produce

All about community gardens at Maple Leaf Foods plants.

Employee community gardens are springing up across Maple Leaf Foods food processing plants. The community garden at our McLeod facility is now in its third year and has over 20 plots. Half of the plots are managed by staff and their families and the other half is managed by volunteers; all proceeds are donated to the Saskatoon Food Bank.

The community garden in our Brandon facility has 50 plots for employees and a Volunteer Garden, with all produce being donated to the Samaritan House. And, the community garden at our Lagimodiere facility has 20 plots all assigned to individual team members.

Volunteering with One of Our Partners

Maple Leaf Foods employees volunteer at McQuesten Urban Farm.

Each season over 200 Maple Leaf Foods employees support one of our partners, McQuesten Urban Farm, in Hamilton, to help harvest vegetables and prepare plots for planting. One team happened to be part of the filming of TVO’s *The Life-Sized City* documentary on how to make Canadian urban centres a better place to live.

Building Homes

Rolling up our sleeves and building homes with Habitat for Humanity.

A team of Maple Leaf Foods employees from our Brandon facility rolled up their sleeves to help the Brandon chapter of Habitat for Humanity build homes in the community.

Occupational Health and Safety

Occupational Health and Safety

Health and safety in all aspects of the Maple Leaf Foods workplace is a top priority. Our mandate for Occupational Health and Safety (OHS) remains clear – an aspirational goal of zero occupational injuries.

OCCUPATIONAL HEALTH AND SAFETY AT MAPLE LEAF FOODS

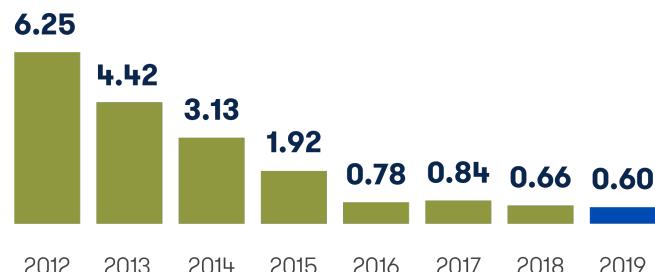
We strive for zero occupational injuries in the workplace, a goal driven by our commitment to employee safety. Through our Safety Promise and continuous improvement in our safety protocols, in 2019 we realized a 90.4% improvement in our Total Recordable Incident Rate (TRIR) since our 2012 baseline reporting year.

To advance our workplace safety program and goals, our Vice-President, Health & Safety, Security, Sanitation and Environment reports to the Chief Food Safety and Sustainability Officer. They both work closely with the operations leadership across our sites and report directly to the Safety and Sustainability Committee of the Board of Directors three times a year.

Maple Leaf Foods employs a Senior Health, Safety, Security and Environment (HSSE) team that provides leadership across the Company. This team is supported by an HSSE designate at each work-site and representatives from the Joint Occupational Health and Safety (OHS) committees that represent all Maple Leaf Foods employees. These formal joint management–employee committees monitor and advise on OHS programs, identify potential hazards and recommend controls.

21 Maple Leaf Foods sites had zero lost time injuries in 2019, and are proud members of our Zero Hero Safety Club!

Total Recordable Incident Rates (2012–2019)



90.4% improvement from our 2012 baseline.

OUR SAFETY PROMISE

Our goal is to always provide consumers safe, great tasting food produced in a safe work environment.

- We commit to becoming a global leader in food safety and job safety, and providing the focus and resources needed to achieve this goal.
- We commit to establishing a culture of food safety and workplace safety with high-performance teams, where people are encouraged and expected to act on any concern they may have.
- We commit to measuring our safety performance with testing and benchmarking against globally recognized standards.
- We commit to continuously seeking better ways to make safe food, and to make it safely.
- We commit to openly sharing our knowledge with government, industry and consumers, so we can learn from them and they can learn from us.
- We commit to transparency and candour in pursuit of better performance and public confidence.
- We commit to behaving in the most responsible and transparent way possible, placing the safety of our people and our consumers first if there is ever a breach.

This is our Safety Promise.

Michael H. McCain
President and Chief Executive Officer

Our TRIR improved by 90.4% in 2019 compared to our 2012 baseline reporting year.

OUR OCCUPATIONAL HEALTH AND SAFETY STRATEGY

Improved OHS Communication

Proactive Activities that Drive Performance

Roles and Responsibilities that Embrace Accountability

Implementation and Training

Integrated Safety Promise

Maple Leaf Foods' OHS Strategy

Analyzing losses	<ul style="list-style-type: none">• Identification of common incidents and trends• Top losses are identified through incident tracking (after incident occurs), including incidents that are high in severity and frequency
------------------	--

Maple Leaf Foods' OHS Strategy

Analyzing risks	<ul style="list-style-type: none"> • Utilization of risk assessment to mitigate risk • Top risks are identified by measuring compliance with Maple Leaf Foods' HSSE Standards, utilizing the OHS Compliance Scorecard and other risk assessment tools (i.e., measuring OHS systems)
Measuring culture	<ul style="list-style-type: none"> • The employee OHS Perception Survey enables all sites to measure the growth of their safety culture • Sustainable actions and areas of improvement are identified within the cultural drivers of the site's HSSE program

Metrics

Leading OHS indicators	<ul style="list-style-type: none"> • Compliance Scorecard • Perception Survey • Supervisory Scorecard/Vitals • Training
Lagging OHS indicators	<ul style="list-style-type: none"> • Total Recordable Incident Rate (TRIR) • Days Away, Restricted or Transferred (DART) Rate • Workers' Compensation Board Claims

Ongoing skills development and training are essential to continuing to reinforce the importance of workplace safety and procedures to keep people safe. Our supervisors receive training related to recognizing, assessing and controlling hazards, the roles and responsibilities of supervisors, forklift safety, chemical safety and other related topics.

BEHAVIOURAL-BASED SAFETY

Our Behavioural-Based Safety (BBS) program assists in the identification of opportunities for improvement through behavioural trend analysis (with transparent data) of safe and unsafe behaviours.

Corrective actions are taken to correct any unsafe behaviours and recognition is provided to the employee who identified the unsafe behaviour to be corrected.

Over the years, we have developed behaviour observation tools for our sites to utilize as well as a behaviour tracking tool.

ZERO HERO SAFETY CLUB RECOGNITION PROGRAM

The Maple Leaf Foods “Zero Hero Safety Club” is an internal campaign to drive and support the OHS program in order to realize the aspirational achievement of zero occupational injuries.

Our facilities become members of the “Zero Hero Safety Club” when they achieve zero occupational injuries and meet other criteria.

The Safety Promise Awards program is an internal recognition program that recognizes a Maple Leaf Foods site with the best overall performance and/or the most improved performance from a Food Safety and OHS perspective.

In 2019, we had 21 sites that had zero workplace injuries and became members of the Zero Hero Safety Club!

OCCUPATIONAL HEALTH AND SAFETY GOLDEN RULES

Our “OHS Golden Rules” provide a consistent and standardized deployment of critical examples of behaviour that may pose the risk of injury, damage and even death.

The six core rules highlighted are intended to be a framework that supports our current OHS policy, standards, procedures and processes across Maple Leaf Foods facilities. Given the severity of risk inherent in the behaviours illustrated, such actions may result in termination of employment, even if it is the employee’s first offence.

OHS GOLDEN RULES

1. Violation of lock-out/tag-out
2. Bypassing or disabling machine guarding or safety interlock devices
3. Violation of confined space procedure
4. Violation of fall protection procedure
5. Violation of hot work procedure
6. Unauthorized/unsafe use of powered material handling equipment

OUR WORKPLACE SAFETY AWARDS

Each year, we recognize individuals and locations for their outstanding workplace safety record in our annual “Safety Awards.”

Diversity and Inclusion

Diversity and Inclusion

We are committed to creating a workplace environment where everyone feels like they belong, and we believe in the benefits a diverse and inclusive workplace environment brings. To us, championing diversity and inclusion is a critical component to advancing our collective purpose and vision, living the Maple Leaf values and delivering winning results.

Women represented 38% of managers and above, up from 36% when we set our goal in 2017.

"I care deeply about Maple Leaf Foods and our people. I envision a workplace where everyone can thrive, where our individuality is valued and celebrated. I invite everyone to explore what diversity and inclusion mean to you, and how you can foster a workplace of inclusivity."

– Curtis Frank, COO, Maple Leaf Foods

EMPLOYEE RESOURCE GROUPS

Our Employee Resource Groups (ERGs) are instrumental in helping foster and sustain a culture of belonging. They reflect our diverse and inclusive workplace.

Employee Resource Group	About
	The Multi-Cultural Advocacy Network (Multi-CAN) aims to share knowledge, promote cultural fluency and celebrate the strength of our collective differences to support an inclusive environment.
	Maple Leaf Pride & Allies creates a safe environment for LGBTQ+ individuals and allies. This ERG encourages everyone to be fully authentic in the workplace through visibility, education and advocacy.
	The Women's Impact Network is committed to advancing gender equality by creating meaningful connections so that all talent thrives at Maple Leaf Foods.
	Women in Manufacturing is dedicated to attracting, engaging and advancing women in manufacturing, closing the gender gap at Maple Leaf Foods' plants, and unleashing the full potential of our talent.

MENTAL HEALTH AND WELLBEING

Mental health is a growing concern across all segments of society, and its pervasiveness is so great that in any given year, one in five Canadians will personally experience a mental health problem or illness. The impact reaches across families, amongst friends and communities. Maple Leaf Foods has started the You Are Not Alone! Initiative to develop a culture that stops the stigma associated with mental health challenges.

To learn more about our mental health initiative, click [here](#).

OUR GUIDING PRINCIPLES

- Actively build a workforce as diverse as the countries we are proud to serve
- Enable top performance by removing barriers, so talented people can exert their energy on doing great work, leveraging our differences
- Learn from each other's unique experiences and perspectives, in a culture of openness and inclusion
- Create food that meets the diverse needs of the world we live in

Our Diversity Stories

Maple Leaf Foods' people celebrating our cultural diversity in our communities and across our facilities. Click on the photos to read our stories.

Marching in Pride Toronto

Maple Leaf brand a proud sponsor of Pride Toronto in 2019.

Maple Leaf Foods and Prides & Allies hosted several events dedicated to LGBTQ+ individuals and allies.

The Maple Leaf brand was honoured and proud to be a sponsor of Pride Toronto in 2019. About 80 Maple Leaf Foods team members took part in this exciting event! The Maple Leaf brand was also the presenting sponsor for Family Pride where we served over 1,700 Natural Top Dogs to happy consumers and had many touching contributions to our interactive art wall that read "Real Proud."

The day was marked with love and kindness and was a true representation of our strong support of the LGBTQ+ community.

Celebrating Women

Celebrating women at Maple Leaf Foods during International Women's Week festivities.

Maple Leaf Foods, Women's Impact Network and Women in Manufacturing hosted a company-wide celebration dedicated to gender equality and empowerment.

International Women's Week is a big deal at Maple Leaf Foods. We host a series of events across all facilities celebrating women. At our headquarters in Mississauga, we had three guest speakers: **Anastasia Bucsis**, two-time **Olympic Athlete**, who shared stories on her Olympic career, speaking to the fear of failure and the importance of resilience; Michelle McVittie, self-care coach, who explored tools and techniques required to be a leader of change; and Hadiya Roderique, a diversity and inclusion advocate, journalist and lawyer, who discussed barriers and challenges to diversity and inclusion.

Across our facilities, we encouraged all of our employees to take a pledge in support of gender equality.

Cultural Diversity

Supporting and celebrating our cultural diversity at Maple Leaf Foods.

Following its launch in the summer, the Multicultural Advocacy Network (Multi-CAN) hosted a growing series of events, with hundreds of employees, dedicated to supporting and celebrating cultural diversity.

Multi-CAN, a newly created Employee Resource Group in 2019 focused on educating, supporting and celebrating our amazing diversity at Maple Leaf Foods, has hosted a number of events throughout 2019. The Multi-CAN team hosted a lunch with over 15 different meal items serving over 450 of our employees.

Multi-CAN also launched a series of talks titled "Ask Me Anything," where a Maple Leaf Foods employee shares their culture and answers questions from the audience allowing everyone to get to know a culture on a deeper level. In 2019, we learned about the cultures of the Philippines and Mexico.

Mental Health is Health

Championing mental health and creating a psychologically safe workplace.

At Maple Leaf Foods, we have a desire to create a psychologically healthy and safe workplace for all our people, and support them through proven, effective means. It is our intention to develop a culture that stops the stigma associated with mental health problems, where people can be open and transparent, experience understanding and be provided with an array of resources and support.

As part of Mental Health Awareness initiatives at Maple Leaf Foods, we invited guest speaker Orlando Da Silva to share his own experience with depression. Orlando is a Senior Crown Counsel, a former Bencher of the Law Society of Ontario, the former President of the Ontario Bar Association and a Law Society Medalist.

Leadership

Leadership

HOW WE DEVELOP OUR PEOPLE

At Maple Leaf Foods, we have a Leadership Edge commitment, which is a commitment to be leaders in how we engage and develop our people.

We have a culture that enables great people to thrive, succeed and reach their full potential – to take a stand, pursue excellence and create the future. To that end, we have various programs in place to provide our people with career development opportunities, such as self-directed learning, training, coaching, and recognition and rewards.

THE LEADERSHIP TRACK PROGRAM FOR NEW GRADUATES

The Leadership Track Program is Maple Leaf Foods' early leadership development program for talented, driven and ambitious graduates. The three-year program has recruited over 300 leadership trainees since it was established in 1998, with 28 participating in the 2019 program.

Our aim is to achieve a 95% retention rate of top talent.

Participants in the program will get a lot of experience: on-the-job training, learning and networking opportunities with other participants and program graduates, senior management mentoring, annual performance reviews, competitive compensation package and career coaching.

The program offers three diverse and meaningful roles across select areas, and participants spend one year in: a client- or market-facing role, an operations role, a support role.

LEADERSHIP EDGE

At Maple Leaf Foods, we have a Leadership Edge commitment, culture and expectation. We strive to be leading edge in how we engage, develop and provide a safe working environment for our people. It is a culture that enables great people to thrive, succeed and reach their full potential – to take a stand, pursue excellence and create the future. We have various programs in place to provide our people with career development opportunities.



Better Planet

page 57 of 84

Overview

Goals

- Reduce our environmental footprint by 50% by 2025 (2014 baseline)
- Execute on our SBTs: 30% absolute reduction for Scope 1 & 2 emissions and 30% intensity reduction (per 1,000 kg of product produced) for Scope 3 emissions (2014 baseline)
- Reduce food waste arising from our operations by 50% by 2025 (2016 baseline)
- Finalize and implement our sustainable packaging strategy in 2020
- Begin the process of renovating our current supplier code and broader sourcing strategy

2019 Highlights

- Became the first major food company in the world to be carbon neutral
- Finalized our carbon management strategy in 2019 and set science-based targets approved by the Science Based Targets initiative (SBTi)
- Reduced the intensity of our environmental footprint since 2014 by: (21.8)% Electricity; (9.8)% Natural Gas; (16.7)% Water; (19.2)% Solid Waste
- Utilized intermodal transport so that it accounted for 83% of our cross-country resupply
- Conducted food loss/waste assessments at four of our facilities in 2019

At Maple Leaf Foods, leading in sustainability is not only one of our core strategies, but it also represents an enterprise-wide view that encompasses every aspect of our business.

We have an aggressive goal of reducing the intensity of our environmental footprint by 50% by 2025, and new absolute and intensity-based science-based targets (SBTs) for greenhouse gas (GHG) emissions.

REDUCING OUR ENVIRONMENTAL FOOTPRINT

Today's food system includes everything involved in feeding people and animals, including all steps in the food supply chain, from growing and harvesting to processing, trading, marketing, distribution, consumption and disposal. A healthy food system is one with inclusive outcomes for healthy people and a healthy planet, and of course, healthy businesses. One of the greatest challenges for the food system is to meet the increasing global demand for food while dramatically decreasing the environmental footprint of food production, as agriculture accounts for approximately 25% to 30% of total greenhouse gas emissions. Livestock is the world's largest user of land resources, with pasture and land dedicated to the production of feed representing almost 80% of total agricultural land. Agriculture also uses approximately one-third of the world's fresh water.

Research has identified that pig and poultry production accounts for less than 10% of total livestock greenhouse gas emissions,* while providing more than three times as much meat as cattle. Pork and poultry also require up to five times less feed to produce a kilogram of protein than a cow, a sheep or a goat.

* Food and Agriculture Organization of the United Nations (FAO), 2013; Tackling Climate Change through Livestock – A global assessment of emissions and mitigation opportunities.

We have big, bold goals to reduce our environmental footprint by 50% by 2025. Our bold intensity (per metric tonne of production) goals are driven by the passion of our people to reduce our impact on the environment and contribute to the sustainable growth of our business.

Since our baseline year of 2014, we have made significant progress in reducing our environmental footprint:

Total Energy Intensity

12.3% reduction

Electricity Intensity

21.8% reduction

Natural Gas Intensity

9.8% reduction

Water Intensity

16.7% reduction

Solid Waste Reduction Intensity

19.2% reduction

90.7% landfill diversion rate

SBTs (Scope 1 & 2 Emissions) Absolute Reduction

0.5% reduction (CO₂e)

Note: Performance measured from 2014 baseline with the exception of solid waste, which is a 2015 baseline, and SBTs (Scope 1 & 2), which are a 2018 baseline.

2019 Performance Summary Tableⁱ

A detailed summary of our energy, water and waste usage, as well as our greenhouse gas (GHG) emissions for 2019, can be found in our environmental footprint performance summary represented in the table below:

Consumption¹

Parameter	2019	2018	2017	2016	2015	2014
Total Energy (MWh) ¹	1,081,485	1,094,667	1,087,042	1,057,901	1,097,429	1,182,622
Direct Energy – Natural Gas (m ³) ²	62,678,340	63,579,425	61,208,051	58,813,278	61,407,738	66,703,818
Indirect Energy – Electricity (MWh) ³	376,794	387,807	400,350	405,009	418,567	464,057
Water (m ³) ⁴	8,674,257	8,991,142	9,055,196	9,001,290	9,377,508	9,999,679
Landfill Diversion Rate (%) ⁶	90.7%	90.7%	91.7%	91.4%	91.1%	–

Intensity⁷

Parameter	2019	2018	2017	2016	2015	2014
Total Energy (MWh) ¹	1.64	1.65	1.59	1.55	1.65	1.87

Parameter	2019	2018	2017	2016	2015	2014
Direct Energy – Natural Gas (m ³) ²	95.01	95.85	89.58	86.36	92.29	105.32
Indirect Energy – Electricity (MWh) ³	0.57	0.58	0.59	0.59	0.63	0.73
Water (m ³) ⁴	13.15	13.55	13.25	13.22	14.09	15.79
Landfill Diversion Rate (%) ⁶	25.54	24.96	28.51	29.02	31.61	–

50% x 2025 Footprint Intensity Reduction

Parameter	50% x 2025 target	Intensity reduction	% Reduction	Units
Total Energy (MWh) ¹	0.93	0.23	12.3	MWh/1,000 kg
Direct Energy – Natural Gas (m ³) ²	52.66	10.32	9.8	m ³ /1,000 kg
Indirect Energy – Electricity (MWh) ³	0.37	0.16	21.8	MWh/1,000 kg
Water (m ³) ⁴	7.89	2.64	16.7	m ³ /1,000 kg

Parameter	50% x 2025 target	Intensity reduction	% Reduction	Units
Landfill Diversion Rate (%) ⁶	15.81	6.07	19.2	kg/1,000 kg

Consumption¹

Parameter	2019	2018	2017	2016	2015	2014
Scope 1 & 2 CO ₂ e (tonnes) ⁵	366,126	367,876	–	–	–	–

Intensity⁷

Parameter	2019	2018	2017	2016	2015	2014
Scope 1 & 2 CO ₂ e (tonnes) ⁵	–	–	–	–	–	–

30% x 2030 SBTs Absolute Reduction

Parameter	30% x 2030 target	Absolute Reduction	% Reduction	Units
Scope 1 & 2 CO ₂ e (tonnes) ⁵	110,363	1,750	0.5	CO ₂ e (tonnes) ⁵

i. Our performance is reported consistent with our report boundary. In 2019, we have reported on entities over which Maple Leaf Foods has operational control – our processing and manufacturing facilities; distribution facilities and offices (both leased and owned buildings); and farms, barns and feed mill

operations (unless otherwise indicated). In 2019, we added in our Viau Food Products Inc. and Cericola Farms Inc. acquisitions into our reporting year and we restated our footprint intensity performance back to our baseline year (2014). In 2019, we applied the GHG Protocol's updated emission factors to our GHG emissions and restated our science-based targets back to our baseline year (2018).

1. Consumption: Electricity, natural gas, water and GHG emissions (Scope 1 & 2): Energy and water consumption and GHG emissions reflect actual usage/emissions.
2. Direct energy: Direct energy represents the consumption of natural gas and is recorded on an as-billed basis for the calendar year.
3. Indirect energy: Indirect energy represents the consumption of purchased electricity and is recorded on an as-billed basis for the calendar year.
4. Water: Water consumption is recorded on an as-billed basis for the calendar year.
5. Greenhouse gas (GHG) emissions: GHG emissions are measured in units of carbon dioxide equivalent (CO₂e). GHG emissions related to total energy were calculated using the most recent emission factors available from Environment Canada's National Inventory Report 1990–2017, the Climate Registry 2019 General Reporting Protocol USA Industrial Sector and the United States Environmental Protection Agency (EPA) Emissions & Generation Resource Integrated Database (eGRID) 2018. Scope 1 sources include natural gas, propane, number 6 fuel oil, our corporate car fleet, Maple Leaf Foods-owned trucks and shunt trucks, animal emissions and manure management, renewable natural gas, and CO₂ used in process and refrigerants. Scope 2 sources include electricity and green power. Scope 3 emissions are currently not included in our intensity calculations.
6. Landfill diversion rate (%): Represents the amount of waste diverted from our operations away from landfill in %. Waste intensity: Represents the amount of waste disposed at landfill (kg) per 1,000 kg of production. Landfill diversion rate and intensity: Established by a consolidation of the results of representative third-party, non-hazardous solid waste audits and measured performance of our landfill diversion initiatives. Maple Leaf Foods has a recycling process in place for empty toner, e-waste and batteries. Due to data limitations, the weight for these recycled materials was not included in our landfill diversion rate calculation. 2015 is our baseline year for waste diversion.
7. Intensity: Represents the individual performance measure per 1,000 kg of production (finished product). To avoid double counting, finished product does not include product volumes sold between Maple Leaf Foods business groups.

ENVIRONMENTAL FOOTPRINT PERFORMANCE SUMMARY

Since 2014, we have been progressing toward our environmental footprint reduction targets. We achieved significant reductions on all our environmental performance measures in 2015 and 2016, resulting from third-party utility audits we implemented at each facility, and the development and implementation of environmental sustainability action plans that were created for each of our facilities. Key projects implemented included a national LED lighting retrofit program, heat recovery projects, water conservation/reuse opportunities, and organics diversion and recycling programs. Most of these projects also drove capital investment at each facility to sustain our environmental performance into the future.

By the end of 2017, our performance on natural gas and water started to plateau, and by the end of 2018, only electricity usage and solid waste remained ahead of our plan. In 2019, we fell slightly further behind our plan. However, we did achieve annual reductions in consumption: (2.8)% for electricity, (1.4)% for natural gas and (3.5)% for water over the previous year. Our reductions would have been much greater if not for the increased footprint we gained from our acquisitions of Cericola Farms Inc. and Viau Food Products Inc.

We recognize that much more work needs to be done to get back on track and achieve our goals. In 2019, we commenced re-auditing our facilities to update their environmental sustainability action plans and working with local partners on conservation programs. For example, our partnership with Enbridge/Union Gas at our Heritage facility yielded significant results, including a reduction of approximately 540,000 m³ of natural gas. Key projects included steam trap repairs, heat recovery projects and a boiler overhaul. Successes from these projects are being shared with all other facilities.

2019 was also a milestone year for Maple Leaf Foods as we finalized our carbon management strategy and set science-based greenhouse gas (GHG) emissions targets (SBTs) approved by the Science Based Targets initiative. Our SBTs are the most ambitious greenhouse gas emissions targets in our industry. We also became the first major food company in the world to become carbon neutral.

To meet our SBTs, we are in the process of developing comprehensive GHG emissions reduction plans for our Scope 1, 2 & 3 emissions. Since a significant amount of our Scope 1 & 2 emissions are produced by the fuels and electricity consumed at our facilities, our reduction plans will identify transformative energy reduction opportunities that will assist in meeting our 50% x 2025 goals as well as our SBTs. We are excited about the potential opportunities for environmental footprint reduction for our Company.

ENVIRONMENTAL SUSTAINABILITY ACTION PLANS

Our utility auditing and action plan development process has identified many common energy, water and waste reduction opportunities that we have classified as a priority due to their high return on investment and positive impact on reducing our environmental footprint. The chart here provides a breakdown of the types of findings that were prioritized as part of the utility audits conducted from 2015 to 2019, as well as seven Food Loss & Waste audits which were initiated in 2018 and 2019.

An action plan tracker to measure how each plant is progressing in meeting reduction targets is also utilized and updated quarterly.

We are actively working on energy, water and solid waste projects that were prioritized using an effort-impact matrix. The key determinants used in this exercise included implementation of capital, timing and human resource requirements concerning effort. Savings generated, the number of utilities impacted and greenhouse gas reduction are the criteria used to score impact.

Our utility auditing and action plan development process has identified many common energy, water and waste reduction opportunities that we have classified as a priority due to their high return on investment and positive impact on reducing our environmental footprint. These include LED lighting retrofits, equipment upgrades, heat recovery projects, water reuse opportunities, organics diversion from landfill and other similar projects.

We are also continually investigating and piloting innovative initiatives such as solar photovoltaic systems, battery storage technology, thermal heat recovery on our ammonia systems, geothermal heating and cooling, and water reuse opportunities at our plants.

Overall, our auditing and action plan program has improved the quality of our environmental data and enhanced our understanding of our performance, cost savings and footprint reduction opportunities.

Carbon and Energy

Carbon and Energy

Maple Leaf Foods announced on November 7, 2019 that we have become the first major food company in the world to be carbon neutral. We have become carbon neutral by aggressively reducing our greenhouse gas emissions and investing in high-impact environmental projects to neutralize our remaining and currently unavoidable emissions.

As of November 2019, we were one of just three animal protein companies globally and the only food company in Canada to set Science Based Targets that are aligned with the goals of the Paris Agreement on Climate Change. Importantly, Science-Based Targets require that we reduce our emissions even as we grow.

We are on a mission to be the most sustainable protein company on earth. We recognize that creating nutrient-dense protein like ours takes resources, and today, we are proud to replenish the environment in equal measure.

Carbon Inventory

In technical terms, emissions can be categorized into three different types:

Scope 1: All direct greenhouse gas (GHG) emissions under Maple Leaf Foods operational control

Scope 2: Indirect GHG emissions from consumption of purchased electricity, heat or steam

Scope 3: Indirect GHG emissions not covered in Scope 1 and 2 that occur throughout the supply chain

What Science-Based Targets Have We Set?

Maple Leaf Foods has pledged to reduce our absolute scope 1 and 2 greenhouse gas (GHG) emissions by 30% by 2030 from a 2018 base year. We produce these emissions directly in our operations and from the electricity we purchase.

We have also pledged to reduce scope 3 GHG emissions by 30% per tonne of product produced over the same period. These emissions are produced in our supply chain, including raw materials, feed and ingredients we purchase and consume, and emissions associated with packaging, plus distribution of our products.

OUR JOURNEY

Becoming carbon neutral is Maple Leaf Foods latest, bold step on its sustainability journey. Since 2015, we have significantly advanced against our environmental footprint reduction target of 50% by 2025, one of the most aggressive intensity reduction targets

in the food industry. We are achieving this by realizing efficiency gains of projects we have implemented across our network, investing in technology and rigorous monitoring.

To neutralize our remaining emissions, we are investing in high-quality, credible and verifiable projects that reduce greenhouse gas emissions to bring our net carbon footprint to zero.

We have come far on our sustainability journey and are committed to continue to lead in critical efforts to fight global warming and to protect the planet.

2013: Maple Leaf Foods appoints Lynda Kuhn, a member of our Senior Leadership Team, to create a company-wide sustainability program.

2014: Maple Leaf Foods embraces the message “you manage what you measure” and sets big, bold goals for the company in key sustainability areas including nutrition, animal care, our people and communities. We set the boldest intensity-based environmental goal in our industry: 50% environmental footprint reduction by 2025.

2015: Maple Leaf Foods brings on board Tim Faveri, VP of Sustainability & Shared Value, to oversee our efforts to become a more efficient and environmentally friendly operator. We also retained an independent engineering firm to audit all our operations to identify improvements in energy, water and solid waste and create an action plan for each facility to reduce its footprint.

2016: Maple Leaf Foods focuses on a multi-phase national program to convert all lighting at facilities to energy efficient LEDs. We also launched heat-recovery projects to capture excess heat generated by compressors, boilers and other equipment and use it to pre-heat water and send to other parts of facilities where more heat is needed. We also began to explore other opportunities like geothermal heating and cooling, solar energy, battery storage, and hybrid and electrical vehicle use.

2017: Maple Leaf Foods completes phase 1 of our national lighting retrofit program and launches phase 2. We continued to focus on our utility usage by implementing a robust utility management system to monitor utility consumption and measure our environmental performance at each facility. This system houses all data which is analyzed to target further reduction strategies.

2018: Maple Leaf Foods completes phase 2 of our national lighting retrofit program and begins to expand the efforts to barns and distribution facilities. We also continued our partnership with a local biodigestion company that accepts organic waste and turns it into renewable energy. We begin the development of a comprehensive carbon management strategy.

2019: Maple Leaf Foods commences re-audits of our largest facilities to assess the impact of the projects we implemented since 2015 and identify additional opportunities to further reduce our environmental footprint. We begin developing a formal feasibility review of anaerobic biodigestion technology to capture methane at our facilities and from pig manure at our barns.

2019: 7 November 2019: Maple Leaf Foods is the first major food company in the world to be carbon neutral! We were able to achieve carbon neutrality by aggressively reducing our greenhouse gas (GHG) emissions, committing to Science-Based Targets for even further reductions and investing in environmental projects that offset remaining GHG emissions, bringing our net footprint to zero today.

Support of Environmental Projects

Maple Leaf Foods is supporting 10 high-impact, environmental projects to neutralize our remaining, unavoidable emissions. These projects are located throughout Canada and the U.S., and many are near the locations where our facilities and barns operate.

This certificate of allocation details our investments in the Verified Emission Reduction projects. This certificate of allocation details our investments in Renewable Energy Credits.

St. Leon Wind Energy

Location: Manitoba, Canada
Technology type: Wind
Certification: Green-e

The St. Leon Wind Energy Project is a 120.5 MW wind project, one of the largest in the province, located approximately 150 kilometres southwest of Winnipeg near the town of St. Leon and Swan Lake First Nation in Manitoba.

[VIEW OUR RENEWABLE ENERGY CREDIT CERTIFICATE OF ALLOCATION](#)

Brady Wind I

Location: North Dakota, USA
Technology type: Wind
Certification: Green-e

Brady I is a 150 MW wind farm sponsored by Next Era Energy, the largest renewable energy developer in North America.

[VIEW OUR RENEWABLE ENERGY CREDIT CERTIFICATE OF ALLOCATION](#)

Spartanburg Landfill Gas

Location: South Carolina, USA
Technology type: Landfill Gas
Certification: Verified Carbon Standard

The Spartanburg project consists of a landfill gas collection system and three different destruction devices to combust collected gas. The county partnered with Miliken Dewey Chemical Plant and Lockart Power to utilize landfill gas from the Wellford Landfill, creating a one-of-a-kind beneficial use project.

The project raises the bar for industry by providing an innovative way to capture methane gas arising from landfills.

[VIEW OUR CERTIFICATE OF VERIFIED CARBON UNIT RETIREMENT](#)
[VIEW THE VERIFIED CARBON STANDARD REGISTRY](#)

University Energy Efficiency & Renewable Energy Projects

Location: Indiana, Wisconsin, Oregon, Illinois, USA

Technology type: Energy Efficiency & Renewables

Certification: Verified Carbon Standard

Ball State University in Indiana, University of Wisconsin-Milwaukee, Southern Oregon University and the University of Illinois Urbana-Champaign have pioneered the use of VCS's methodology designed specifically for higher education. The projects have spurred innovation and encouraged uptake of energy efficiency and renewable energy through the communities surrounding these schools. Campuses reinvest all revenue from carbon credit sales into further emissions reductions projects on campus, accelerating their progress towards carbon neutrality. Each university is part of the Climate Leadership Network, committing to incorporating sustainability and climate action into their curriculums.

[VIEW OUR CERTIFICATE OF VERIFIED CARBON UNIT RETIREMENT](#)

[VIEW THE VERIFIED CARBON STANDARD REGISTRY](#)

AIM Environmental Waste Diversion Project

Location: Ontario, Canada

Technology type: Composting

Certification: CSA Group

The Hamilton Central Composting Facility processes source-separated organics (SSO) in an in-vessel composting system. AIM focuses on converting organic residues from three municipal collection sites to quality compost product.

The project reduces the burden on local landfills and raises the bar for industry by providing a sustainable methodology to divert organic waste away from an anaerobic site, avoiding methane production.

[VIEW OUR CERTIFICATE OF ALLOCATION](#)

[VIEW THE CSA GROUP REGISTRY](#)

Merom Farms Biomass to Energy

Location: British Columbia, Canada

Technology type: Biomass to Energy

Certification: CSA Group

Large commercial greenhouse operation in the Lower Mainland of British Columbia, near the town of Abbotsford, that consists of 36 acres of covered greenhouse area.

The farm produces roughly 11 million pounds of bell peppers per year and ships to grocery stores in Canada and the U.S.

Converted boilers now use waste biomass for their operations, reducing GHGs through displacement of fossil fuels from burning biomass along with reducing landfill feedstock.

The project reduces Merom Farms reliance on fossil fuels and models sustainable agriculture with an emphasis on reducing waste.

[VIEW OUR CERTIFICATE OF ALLOCATION](#)
[VIEW THE CSA GROUP REGISTRY](#)

Energy Efficiency and Solid Waste Diversion Activities Within the Quebec Sustainable Community

Location: Quebec, Canada

Technology type: Energy Efficiency and Solid Waste Diversion Activities Within a Sustainable Community

Certification: Verified Carbon Standard

A grouping of several micro-projects by non-profits and municipalities to create a Sustainable Community offering. Allows them to offset their emissions and support projects that aim to reduce their carbon footprint.

Micro-projects are derived from geothermal, landfill diversion, landfill avoidance of residual waste and energy efficiency.

[VIEW OUR CERTIFICATE OF VERIFIED CARBON UNIT RETIREMENT](#)
[VIEW THE VERIFIED CARBON STANDARD REGISTRY](#)

Massachusetts Tri-City Forestry

Location: Massachusetts, USA

Technology type: Forestry

Certification: American Carbon Registry

Three cities in Massachusetts (Holyoke, Westfield and West Springfield) have launched a joint Improved Forest Management project on 17,000 acres of public forestland in central Massachusetts. (All within approximately 50 miles of Lightlife Foods in Turner Falls.)

These cities are challenged financially and are under pressure to generate increased revenue from their forests – this project enables them to do so without resorting to more aggressive timber harvesting.

The forest management practices of the Tri-City project provide a critical habitat for many mammals, birds and plants.

[VIEW OUR CERTIFICATE OF ALLOCATION](#)
[VIEW THE AMERICAN CARBON REGISTRY](#)

Darkwoods Forest Carbon Project

Location: British Columbia, Canada

Technology type: Forestry

Certification: Verified Carbon Standard

Located near Creston, British Columbia, the Darkwoods project is home to unique land features, species and research and is the single largest private land acquisition for conservation in Canadian history.

Conserved in 2008 and expanded in 2019 by the **Nature Conservancy of Canada**.

There are 135,400 acres protected through this project along with 39 protected species.

This project brings together a wide variety of both private and public-sector partners across Canada and the U.S. as well as local communities and First Nations.

Its lands support several bio-diversity, environmental and forestry management projects, including re-forestry.

[VIEW OUR CERTIFICATE OF VERIFIED CARBON UNIT RETIREMENT](#)
[VIEW THE VERIFIED CARBON STANDARD REGISTRY](#)

Avoidance of Methane Emissions at Organic Compost Soil Amendment Facility

Location: Alabama, USA

Technology type: GHG Emission Reductions from Manure

Certification: The Gold Standard

This project involves aerobic decomposition of chicken manure composting in Castleberry, Alabama.

The chicken manure is purchased from local companies and received at the composting facility as raw material to produce a high potency organic compost that is pathogen free and odourless.

The composting facility processes the organic content of waste through windrow composting to produce the final product, organic compost.

(Maple Leaf Foods has committed to purchase from this project commencing in 2020.)

REDUCING OUR FREIGHT KILOMETRES

We have been optimizing our logistics program since 2011 in an effort to reduce our greenhouse gas (GHG) emissions. All our work has resulted in Maple Leaf Foods eliminating over 8,546,000 km of truck transportation, resulting in a reduction of 9,170 tonnes of GHG emissions.

Optimizing our inbound and outbound logistics program has been one of our efforts to get our product from one point to another in an efficient manner while keeping in mind our environmental footprint.

Here's how we optimized our logistics program:

- Shipping full pallets in a single trip helped us reduce the overall number of trips and trucks on the road
- Consolidation of orders
- Adherence to shipping schedules

Another part of our logistics program that is positively impacting our environmental footprint reduction has been our focus on increasing the use of intermodal transport. In

2018, we increased our use of intermodal transport for our cross-country resupply to 85.5%. In 2019, our intermodal transportation decreased to 82.9% largely due to a CN Rail strike and an increase in customer fill rate challenges. Since 2011, we have eliminated over 8,546,000 km of truck transportation, resulting in a reduction of 9,170 tonnes of GHG emissions.

MANURE MANAGEMENT AT MAPLE LEAF FOODS

Pig manure contains valuable macro and micro nutrients that promote soil health. There are many factors that affect greenhouse gas (GHG) emissions from livestock manure, including temperature, oxygen level (aeration) and moisture.

The type of manure, for example coming from livestock, and how the manure is handled (i.e., piled or managed in anaerobic lagoons) and stored can also contribute to GHG emissions.

Good manure management is essential for minimizing GHG emissions caused by microbial activities during manure decomposition.

The majority of Maple Leaf Foods pig farms are located in Manitoba, where we work with local farmers to recycle manure from the animals we raise. Pig manure contains valuable macro and micro nutrients that promote soil health, so we manage the manure in outdoor lagoons until we can deliver it to local farms for use as organic fertilizer.

Certified agrologists prepare a manure management plan for each of our farms, and registers them with the Province of Manitoba. Once the plan is approved, the manure is applied to the land of local farms based on what nutrients currently exist in the soil, what nutrients are in the manure and the nutrient requirements of the crop. It is only applied at predetermined rates and times of the year to ensure the nutrients are fully incorporated into the soil to prevent runoff.

Manure is valuable and we don't want to waste it. We know it must be applied at the right place, at the right time, in the right quantities. At Maple Leaf Foods, we are responsibly recycling manure and reducing greenhouse gas emissions. Using manure as fertilizer is nutrient recycling at its best!

The Province of Manitoba has a comprehensive manure management program that ensures manure is used appropriately as fertilizer. Proper manure management is essential for any agricultural operation because improper use can lead to negative impacts on the environment.

Watch the video "Manure Matters" from Manitoba Pork for more detailed information.

EMPLOYEE CARPOOLING PROGRAM

Maple Leaf Foods has partnered with Commute Ontario, a province-wide program designed to encourage commuters to adopt healthy and sustainable transportation options. Our employees can sign up with Carpool Ontario and search for people to carpool with. They also have great tools that allow our employees to set goals, track and monitor progress, and convert the distance travelled into greenhouse gas emissions saved.

Since the program's inception, our employees have logged 2,200 carpooling trips and a total of 71,846 km. To date, we have avoided 9.1 tonnes of CO₂ emissions through carpooling.

Learn more about Commute Ontario

Reducing Natural Gas Consumption Across Our Operations

Boiler Optimization

Improving boilers across our facilities.

We have carried out several projects to upgrade, refurbish and optimize our boilers to reduce gas usage. At our Heritage facility, boilers are the second largest load for natural gas at the plant, and we calculated a 7% efficiency improvement through boiler upgrades.

Steam Trap Repairs

Repairing steam traps to identify deficiencies.

We completed steam trap audits at our facilities to identify deficiencies. At our Heritage facility, we identified that about 20% of our steam traps were leaking, out of which half were repaired in 2019, resulting in an estimated savings of 174,000 m³ in natural gas consumption and a reduction of 330 tCO₂e.

Low-Flow Sanitation Guns

Improving natural gas efficiency when cleaning equipment.

We are using lower-flow sanitation guns to sanitize equipment at our production facilities. Decreasing water consumption in sanitation leads to less natural gas consumption. At our Brandon facility, we estimate approximately 1,186,588 m³ of annual savings in natural gas use as a result of installing lower-flow sanitation guns.

Water

Water

Water is of great importance to Maple Leaf Foods, and we continue to explore ways to reduce our absolute water consumption and use water more efficiently. Since 2015, we have completed approximately 130 water conservation/reuse projects across our facilities and have been progressing toward our water intensity reduction target of 50% by 2025.

By the end of 2017, our water consumption had started to increase across our business for a variety of reasons, including the addition of our new Field Roast Grain Meat Co.TM facility and multiple line/facility expansions at other facilities to increase production. In 2018 and 2019, we implemented several water conservation projects across our operations and reduced our water consumption by 381,000 m³ from 2017 levels.

We are still not satisfied with our performance on water efficiency. We recognize that much more work needs to be done to get back on track and achieve our 2025 goals. In 2019, we commenced re-auditing of our key operations to update our action plans and identify any further opportunities for reduction and efficiencies.

We've reduced our water consumption by 1,325,422 m³ since our 2014 reporting baseline year.

Conserving Water Across Our Operations

We have been re-auditing our key operations and implementing processes across our facilities that help us reduce our water consumption. Click on the photos to learn more.

Boiler Optimization

Improving water boilers and cooling towers across our facilities.

We have carried out several projects to optimize the boilers and cooling towers at our facilities to minimize the water usage requirements. These projects have resulted in over 350,700 m³/year in water savings since 2015.

Low-Flow Sanitation Guns

Improving our water conservation when cleaning equipment.

We are using lower-flow sanitation guns to sanitize equipment at our production facilities. This switch has largely improved our water conservation efforts by reducing 64,536 m³/year. At our Brandon facility, we estimate a 153,442 m³/year savings in water consumption as a result of installing lower-flow sanitation guns.

Reducing Water Consumption

What we're doing to reduce water waste.

We have also eliminated water use during non-production times – the weekend, holidays and after hours – at several facilities. As well, when a facility-wide water leak occurs, we react and repair the issue to eliminate the amount of water waste. We estimate that these repairs and water shutoffs will result in 159,466 m³/year in water savings.

Solid Waste

Solid Waste

Reducing solid waste across our facilities and operations is important for Maple Leaf Foods. We are constantly exploring new opportunities to reduce the production of solid waste at our facilities, improve our landfill diversion rate, and reduce the amount of food loss and waste arising from our business. To that end, we have conducted solid waste audits and performed internal analysis in order to measure our performance and identify opportunities for improvement.

Our 2019 diversion rate is 90.7%. We diverted 7,925 metric tonnes of organic waste from landfill.

SOLID WASTE AUDITS

Our solid waste audits weigh solid waste components that are generated, recovered, recycled and disposed of at each facility.

We conduct solid waste audits annually at the majority of our facilities through our established waste management vendors. Depending on the year, we may need to rely on audits at representative facilities. We combine our audit results with data measured from individual waste diversion initiatives at each site to establish our overall landfill diversion rate.

Similar to how we prioritize our utility audit findings, we conducted an effort–impact analysis of the opportunities to assess execution and prioritization. We assessed impact according to the findings’ contribution to the waste reduction stream, as well as savings. The effort analysis was based on the availability of municipal infrastructure, capital investment, timing and human resource requirements.

From our audits, we determined that the following three areas provide opportunities for improvement in our waste diversion rates: organics, plastics and paper.

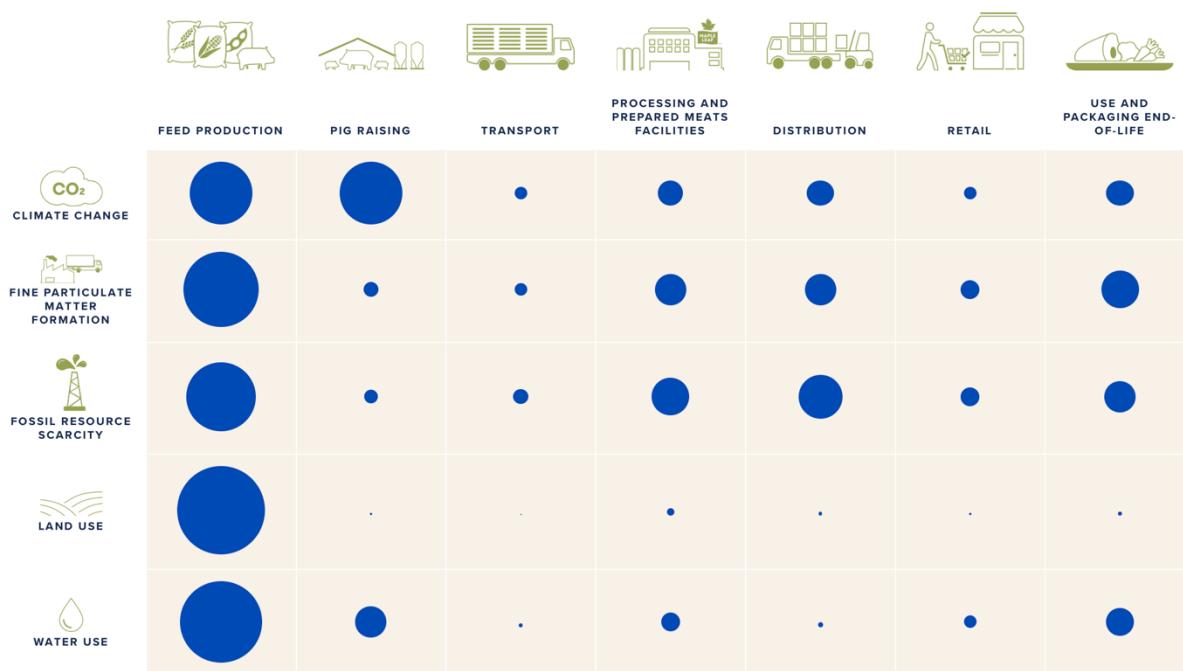
Our biggest opportunity continues to be the diversion of organic sludge from our Brandon wastewater facility, which will significantly improve our overall landfill diversion rate.

We reduced our organics waste by 3% from 2018.

LIFE CYCLE ASSESSMENT

We conducted a comprehensive life cycle assessment (LCA) of our products to gain an insight into the relationships between the various production phases and their relative environmental impact(s).

ENVIRONMENTAL IMPACT OF MAPLE LEAF BACON (375 G)



* Life cycle assessment of Maple Leaf bacon prepared by Ecofys, a Navigant company, finalized in 2018. In the graphic above, the size of the circle is proportional to the magnitude of the impact.

Life cycle assessment (LCA) is a useful tool to identify and prioritize initiatives that will further reduce the environmental impacts of the product that is assessed. We conducted a life cycle assessment (LCA) of one of our products, Maple Leaf bacon (375 g product), according to the requirements of ISO 14040 and ISO 14044.

As the results show in the graphic, environmental impacts occur throughout the entire pork production chain, with the most significant impacts coming from feed production and pig raising.

The study highlighted several recommendations that will help Maple Leaf Foods realize a significant reduction in our environmental impact. Optimizing feed composition, considering different transportation modes and investigating ways for further reduction of methane emissions from barns are among the recommendations.

REDUCING FOOD WASTE

We are committed to reducing food waste arising from our operations by 50% by 2025. That's why we've implemented a rigorous process to define and measure "food loss/waste" using the Food Loss Waste Protocol, and are investigating how food loss and waste are impacting our business.

We are committed to reducing food waste arising from our operations by 50% by 2025 (2016 baseline) and investigating how food loss and waste are impacting our entire supply chain.

In 2019, we engaged in a rigorous process to define food loss and waste using the Food Loss Waste Protocol developed by the World Resources Institute (WRI). We conducted food loss/waste audits at four sites and worked to establish a baseline for each of our operating units. Due to our vertically integrated business model, we determined that the majority of food waste occurs within our prepared meats and distribution centre facilities.

In 2020, we will conduct additional food loss/waste audits to help us develop a consistent standard to collect data and identify opportunities for improvement.

We are proud of the progress we have made to date on solid waste reduction. However, we still must work to ensure that food waste and other organics from our facilities do not end up in landfill.

Since 2016, we have diverted over 16,665 metric tonnes of organics from our Ontario facilities to StormFisher Environmental in London, Ontario. Through bio-digestion, this volume of waste has produced over 6,938,700 kWh of green electricity, prevented over 7,575 metric tonnes of CO₂ from being released into the atmosphere and produced 1,136 metric tonnes of organic fertilizer.

ELIMINATING WASTE IN OUR SUPPLY CHAIN

To transport our products, we have partnered with CHEP, a provider of reusable pallets that are built from 99.7% certified lumber (PEFC and FSC certifications). Every time we use one of CHEP's reusable pallets, rather than one-way packaging, we eliminate waste and improve efficiency. Over 10 years, we have reduced substantial environmental impacts:

BARRELS OF OIL	KG OF SOLID WASTE	MILLION BTUs OF ENERGY	TONNES OF CO₂
4,228	513,601	24,525	388

To realize our vision to be the most sustainable protein company on earth, we work with partners who share our determination to relentlessly eliminate waste, reduce our environmental footprint and improve efficiency throughout our supply chain.

One of those partners is CHEP, a provider of top-quality shared and reusable pallets. Our longstanding partnership has demonstrated the benefits of CHEP's circular business model and the value of working with an industry leader who shares our determination to create a better planet.

From start to finish, CHEP pallets reduce our environmental impact. CHEP pallets are built from 99.7% certified lumber (PEFC and FSC certifications). The CHEP network is designed to eradicate empty transport miles, helping us reduce emissions and freight kilometres. The benefits of using pooled platforms continue even if a pallet is damaged, and whenever possible, CHEP repairs its platforms and returns them to its network.

When a pallet reaches the end of its usable life, CHEP doesn't send it to a landfill. They work to find the highest value in all waste material. Solutions range from conversion of the waste wood to mulch or animal bedding, to producing particle board for the furniture industry. Every step supports CHEP's work toward creating a Zero Waste World, a collaborative program launched by Brambles, CHEP's parent company.

Maple Leaf Foods is proud to work with CHEP. As we continue our work to become the most sustainable protein company on earth, CHEP's sustainable and practical solutions make our ongoing, successful partnership a natural fit. The diagram below represents CHEP's circular model.

Waste Reduction Across Our Operations

We have been implementing waste reduction initiatives across our operations and in our facilities. Click on the photos to learn more.

Recycling Electronics

Partnering up with TechReset to prevent used electronics from ending up in the landfill.

The electronic waste recycling program has been in place for many years at Maple Leaf Foods.

We have partnered with TechReset to recycle all our used electronics. TechReset has a zero waste to landfill initiative by which its first goal is to repurpose the electronic materials through remarketing. When that is not possible, TechReset works with Ontario Electronic Stewardship (OES) to recycle the material in compliance with all applicable laws and regulations in Canada.

Since 2017, we have repurposed or recycled over 19,630 kg of electronic waste.

Reducing Paper Junk Mail

Two facilities pledge to reduce their paper junk mail.

Two of our facilities, one in Saskatoon and the other in Winnipeg, partnered up to initiate a program to reduce the amount of paper junk mail (i.e., flyers, pamphlets and catalogues) they would receive.

At our Saskatoon facility, all incoming mail was collected, and each vendor with postage information was contacted with the request of being removed from their mailing list. Through this exercise, we were able to reduce our paper mail by about 95%!

Our Winnipeg facility was getting even more paper junk mail – approximately 14 kg per week. Joining our Saskatoon facility, together the two facilities aim to eliminate 1,180 kg of junk mail per year, helping to reduce their environmental footprint.

Eliminating Rubber Boots from the Landfill

Partnering with the Canadian Diabetes Society to repurpose old rubber boots destined for the landfill.

Our Saskatoon facility uses around 400 rubber boots a year for its employees. Every employee is given a pair of boots when they start working at the facility. When an employee leaves and we determine that their boots are in good condition, they are washed, disinfected and reissued to a new staff member.

However, there are boots that cannot be reissued and require disposal because of a small tear or other age-related defects. These boots are collected and donated to the Canadian Diabetes Society where they are repurposed for people in need.

As of December 2019, our Saskatoon facility has donated over 100 pairs of boots to people in need and eliminated them from entering the landfill.

Packaging

Packaging

Over the past few years, packaging waste, namely plastics, has emerged alongside climate change as a global environmental priority, creating increasing momentum for change.

With Maple Leaf Foods' vision to be the most sustainable protein company on earth, we have been working with our suppliers and government stakeholders to improve recycling systems, and have also been working on a comprehensive sustainable packaging strategy. Our strategy will be designed to innovate and develop sustainable packaging for all our products. It will include reducing the overall amount of packaging materials used, where possible, sourcing materials with high recycled content and shifting to fully recyclable materials, over time.

"BLUE BOX" PROGRAM

In Canada, Maple Leaf Foods is considered a packaging steward of the household curbside recycling program of printed paper and packaging. In most Canadian jurisdictions with provincial collection programs (typically referred to as the "Blue Box" Program), costs required to collect recyclables and manage the program have been shared 50/50 between packaging stewards and municipalities. The fees (Stewardship Fees) associated with these programs are administered by the Canadian Stewardship Services Alliance (CSSA) and by Éco Entreprises Québec (EEQ). Across Canada, provinces are moving toward full producer responsibility, which means packaging stewards will eventually bear 100% of the cost of the provincial Blue Box programs.

Annually, we submit the total packaging weight of our branded products and pay fees for each packaging type as established by the CSSA and EEQ.

PARTNERING WITH TERRACYCLE

In 2019, we maintained our long-standing partnership with TerraCycle, a company that specializes in "recycling the unrecyclable." For nearly a decade, TerraCycle has accepted any brand and size of our Schneiders® Lunch Mate™ packaging.

Since the program launched, over 1,300 schools across Canada have collected and recycled over three-quarters of a million (over 785,000) pieces of Lunch Mate™ packaging that would have otherwise ended up in landfills.

SUPPLY CHAIN SPOTLIGHT: SUSTAINABLE PACKAGING

To explore sustainable packaging options for our products, we have partnered with one of our packaging suppliers, Cascades. They supply us with clear protein trays that are made from 100% post-consumer recycled plastic water bottles. Cascades also supplies us with containerboard boxes that are fully recyclable and are made with a majority of Forest Stewardship Council (FSC) certified recycled fibre.

Cascades is a Canadian manufacturer of packaging and tissue products that are made with a majority of recycled content, thanks to its material recovery division. The company has a long-standing commitment to sustainability and circular economy.

Cascades proudly supplies Maple Leaf Foods with clear protein trays for many of our products. These trays are made with 100% polyethylene terephthalate (PET) post-consumer recycled plastic from water bottles.

Cascades also provides Maple Leaf Foods with containerboard boxes that are fully recyclable and are made with a majority of Forest Stewardship Council (FSC) certified recycled fibre. All of Cascades' products are aligned with their core values and the commitment to minimize resource use and reduce their environmental footprint.

Together, Maple Leaf Foods and Cascades are currently evaluating different options of eco-designed packaging solutions that integrate up to 100% recycled content and support a shared commitment to sustainable and recyclable packaging.

PACKAGING INNOVATIONS

Our focus in 2019 was on sustainable packaging, and we worked towards material reduction, post-consumer recycled content, alternative materials and consumer education.

MATERIAL REDUCTION

We achieved a **40%** reduction in packaging material weight across Maple Leaf® branded LunchKits by replacing the paperboard sleeve with pre-printed film.

We achieved a **14%** average reduction in packaging material weight across Maple Leaf Prime® Further Processed Poultry by right sizing the packaging components.

RECYCLABLE, POST-CONSUMER RECYCLED CONTENT (PCR) AND ALTERNATIVE MATERIALS

We used **100%** recyclable packaging components for our Swift® Premium Chicken Mini Pot Pie.

We used **100%** recyclable trays that are made with 95% post-consumer recycled content for our Maple Leaf Prime® Organic Boneless, Skinless Chicken Thighs, Lightlife™ Plant-based Burger and Greenfield™ Fresh Pork.

CONSUMER EDUCATION

We are the first Canadian food company to partner with How2Recycle. How2Recycle is a standardized labeling system that provides instructions for proper recycling. We are exploring collaborative opportunities with the How2Recycle program.

We are the world's first carbon neutral food company to partner with Loop, a global circular shopping platform designed to eliminate the idea of waste by transforming

products and packaging from single-use to multi-use. We are working together to support a Canadian launch of the Loop program in 2020.

Supply Chain

Supply Chain

A typical consumer company's supply chain accounts for approximately 80% of greenhouse gas emissions. In 2019, Maple Leaf Foods engaged in a rigorous process to develop a comprehensive Carbon Management Strategy and calculate our carbon inventory to fully understand where our Scope 1, 2 and 3 greenhouse gas (GHG) emissions reside. We identified that our supply chain emissions (Scope 3) in 2019 accounted for 78.4% of the Company's total greenhouse gas emissions.

We realized that if we want to support our vision to be the most sustainable protein company on earth, we need to consider the impacts of our supply chain and develop a plan to drastically reduce our Scope 3 emissions. In 2019, we set science-based targets approved by the Science Based Targets initiative (SBTi) to reduce our Scope 3 emissions intensity (per tonne of product produced) by 30% by 2030.

Learn more about our Carbon Management Strategy and Science Based Targets.

MAPLE LEAF FOODS' VALUE CHAIN

Maple Leaf Foods' value chain – farm to fork.

Maple Leaf Foods' Value Chain – Farm to Fork

Inputs

We source North American grains for our animal feed, and we own five mills that produce rations for our pigs. We source hogs and hatching eggs from our own system and also from trusted suppliers.

Barns and Hatcheries

We own pig barns (sow, nursery and finishing barns in Manitoba) and hatcheries (in Ontario and Alberta) that supply chicks to contract producers. All are closely monitored and audited to ensure high levels of animal care.

Transportation

We transport our eggs, chickens and pigs using specially trained drivers, which helps ensure consistent animal care and reduced stress. We use new hydraulic-lift pig trailers and are piloting climate-controlled poultry trailers to further improve animal care.

Processing and Prepared Meats Facilities

Our primary processing facilities, as well as our co-manufacturers, follow strict global food safety standards. Each is monitored by dedicated inspectors and veterinarians from

the Canadian Food Inspection Agency (CFIA), the United States Department of Agriculture (USDA) and Food Safety and Inspection Service (FSIS).

Distribution

Our finished products go to one of two Canadian Maple Leaf Foods distribution centres, or directly to customers and international markets.

Grocery Retail and Foodservice

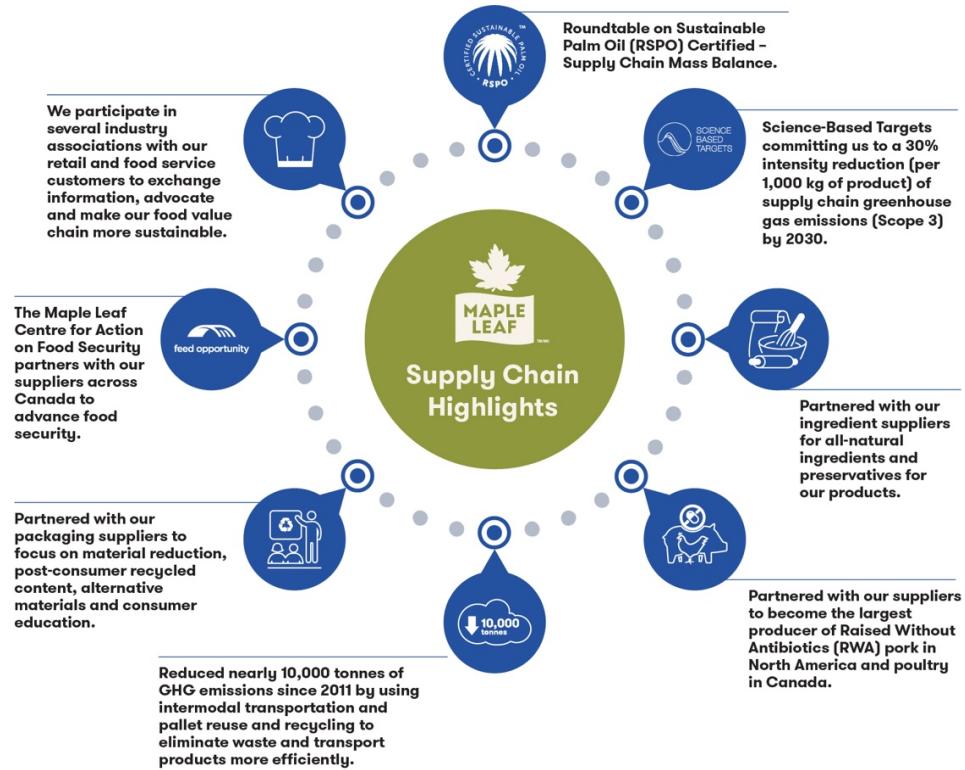
Grocery stores across Canada and the United States carry our brands, as well as private label products that we manufacture on their behalf. We also supply many major restaurants and foodservice companies.

Your Plate

At home and in restaurants throughout North America, people enjoy our high-quality, innovative products every day.

Supply Chain Highlights

Maple Leaf Foods is a member of several organizations and participates in different programs to share knowledge and advance collaboration on supply chain issues. We work with our suppliers, customers and competitors to identify opportunities to reduce our supply chain impacts.



Learn more about our collaborative efforts with our suppliers CHEP and Cascades.